Voluntary Disclosure in the Face of Bank Runs[†]

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ABSTRACT. Using a large sample of hand-collected data on banks' public disclosure in the weeks following the collapse of the Silicon Valley Bank (SVB), we study banks' disclosure response in times of crisis when concerns about depositor runs are salient. We find that banks' susceptibility to depositor coordination failures (i.e., panic runs) is a key factor influencing their disclosure strategies, including the incidence, content, and timing of the disclosures. The results are generally consistent with the theory of He and Manela (2016), which identifies a positive role of public disclosure in preventing panic-based runs. Our study provides some of the first evidence on the importance of coordination motives in shaping banks' disclosure strategy. The results are relevant for information management in times of crisis, an important issue for both bank management and regulators.

Keywords: Bank Runs, Voluntary Disclosure, Coordination, Silicon Valley Bank

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1. Introduction

On March 10th, 2023, Silicon Valley Bank (SVB) was put under regulatory closure after a bank run in which depositors withdrew $42 billion in a single day. SVB's failure set in motion loss of depositor confidence at other small and regional banks. Collectively, these banks lost $220 billion in deposits over the subsequent two weeks, striking fears of a systemic U.S. banking crisis. As deposits declined and concerns about systemic runs mounted, among other things, banks weighed their communications strategy. Executives of Live Oak Bank—a regional bank in North Carolina—articulated the communication dilemma as follows:[1]

"*Should the bank broadcast its underlying financial strength with press releases to assure customers, a step taken by some of its competitors? Or would doing so only raise alarms?"*

That banks actively consider communications to manage depositors' beliefs is perhaps not that surprising. Theories have shown that depositors' beliefs play a critical role in generating runs, and there is a rich history of regulatory attempts to manage depositors' beliefs using disclosures to contain crises (e.g., Gorton and Mullineaux, 1987; Kroszner, 1999; Anderson and Copeland, 2023). In this paper, we examine banks' voluntary disclosure strategies in times of crisis by exploring their disclosure responses following the collapse of SVB. Specifically, we focus on understanding whether and how concerns for depositors' runs shape their disclosure strategy.

What should a bank's disclosure response be when facing jittery depositors in times of crisis? Conventional wisdom suggests that banks should broadcast information about their financial strength to reassure depositors about bank solvency. However, as the dilemma expressed by Live Oak's executives indicates, this decision in the context of banks is far from clear. Theories of bank fragility (e.g., Diamond and Dybvig, 1983) show that a depositor's run decision depends

[1] See "How Wilmington's Live Oak Navigated the U.S. Banking Crisis," The News & Observer, May 25, 2023.

not only on her assessment of whether banks' assets will generate enough cash flows to pay off liabilities (i.e., solvency) but also on her beliefs about the withdrawal decision of other depositors. Because the liquidation value of bank assets can be lower than their cash-generating potential when held on the balance sheet (i.e., value-in-use), depositors are concerned that if a large mass of other depositors withdraw, a bank may be forced to liquidate assets at low prices resulting in default on depositors who are too late to withdraw. Run theories show that such fears can become self-fulfilling, resulting in "panic-based" deposit withdrawals even from solvent banks.[2]

Because of this payoff structure, public signals are useful as they help depositors forecast not only the cash flows from bank assets but also the actions of other depositors. While the former use supports the conventional wisdom about communicating information on bank solvency, the latter role of disclosure—coordinating depositors' beliefs about withdrawals by others—makes the desirable communication strategy theoretically ambiguous.

One set of theories suggests that when coordination motives are important, as in times of crisis, "silence" may be optimal.[3] In such times, there is greater danger of public disclosures serving as a "focal point," creating (self-fulfilling) beliefs about withdrawals by a large mass of other depositors, resulting in panic-based withdrawals that would not occur in the absence of disclosure. Lending support to this concern, Michelle W. Bowman, a member of the board of governors of the Federal Reserve System, conjectured that public disclosure played such a role in the collapse of SVB.[4]

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[2] Following the literature, we use the term "panic run" to refer to deposit withdrawals resulting from coordination failures that cannot be justified based on fundamentals alone. Thus, in this paper, panic does not indicate irrational behavior.

[3] See, for example, Morris and Shin (2002), Morris and Shin (2004), Rochet and Vives (2004), Iachan and Nenov (2015), and Banerjee and Maier (2016).

[4] The board member notes: *"But while the risk of uninsured depositors acting collectively was a significant vulnerability, communications from management caused this group to begin to withdraw their deposits on a massive scale and in a coordinated fashion…Simply the act of announcing that the bank's management was taking steps to*

A recent theory by He and Manela (2016), however, offers a more nuanced perspective. He and Manela (2016) enrich the traditional bank-run model to analyze the effect of depositors' private information acquisition on coordination failures. In their model depositors are uncertain about banks' liquidity (i.e., asset liquidation values) and solvency (i.e., cash generating potential of assets) and can privately collect information to resolve the uncertainty. A key result in the paper is that information acquisition about liquidity is socially inefficient and can result in panic runs on solvent banks that are otherwise safe in the absence of information acquisition. Importantly, public disclosures highlighting bank solvency can "crowd out" information acquisition about liquidity and deter such panic runs. Their analysis implies that, instead of silence, banks may strategically highlight information about solvency to deter panic.

While coordination motives are central to bank-run theories and significantly influence theoretical predictions about disclosure strategy, empirical research has yet to adequately explore what role, if any, these motives play in shaping bank disclosure practices. We add to this literature by providing evidence to address several related questions. Are banks' communication strategies shaped by the fear of depositor coordination failures or are they mainly chosen to address depositors' uncertainty about bank solvency? If coordination motives matter, do they induce silence or result in disclosure? If it is the latter, what is the content of these disclosures?

We address these questions by examining banks' voluntary public disclosures in the 30-day period following the regulatory closure of SVB on March 10th, 2023, when concerns about depositor runs were salient. This event period ends before the release of 2023Q1 Call Reports, allowing us to examine whether banks use voluntary disclosures to mitigate depositor panic before a wealth of financial information becomes available through mandatory disclosures. We hand

remediate these issues created panic—highlighting the risks they were confronting—and the panic spread quickly." The entire speech can be found at https://www.federalreserve.gov/newsevents/speech/bowman20230512a.htm.

collect and compile a comprehensive dataset on various forms of public disclosures issued by both public and private banks in this period. These include news or press releases, blog posts, and communications from bank management through letters or video presentations available on their websites. Our final sample includes over 4,000 public and private commercial banks for which the requisite financial data is available. We find that nearly 10% of the sample banks issue a public disclosure during the 30-day period. Over 70% of the disclosures are released within 5 days of SVB failure and the longest time to disclosure is 22 days.

In our main analysis, we compare the disclosure responses of banks with differential vulnerability to panic runs. Bank run models demonstrate that banks are more vulnerable to panic runs when they perform more liquidity/maturity transformation (Goldstein and Pauzner, 2005; Vives, 2014). Recent empirical work confirms that banks that do more liquidity transformation—either by holding more illiquid assets or by relying more on uninsured funding—are more likely to experience panic-based deposit withdrawals (Chen, Goldstein, Huang, and Vashishtha, 2024; Chen, Vashishtha, and Wang, 2024). Accordingly, we capture variation in banks' vulnerability to panic-runs with measures from both the asset-side and the liability-side of banks' balance sheets.

Our asset-side measures, (i) *Asset Illiquidity* and (ii) *Maturity*, capture variation in panic-run motives that results from the wedge between liquidation values of assets and their value-in-use: holding the value-in-use constant, a depositor would be more concerned about withdrawals by other depositors when asset liquidations (should the need arise) are expected to yield lower amounts. Liquidation values can deviate below value-in-use because of the illiquidity of bank assets or increases in market rates, causing potential asset buyers to apply a larger discount (e.g., Plantin, Sapra, and Shin, 2008).[5] Our first measure (*Asset Illiquidity*), based on Berger and

[5] Although traditional run models appeal to the liquidity discount to motivate the wedge between value-in-use and liquidation values, run motives will arise so long as the wedge exists, regardless of its source. A recent theory model

Bouwman (2009), captures variation in liquidation values due to asset illiquidity. The second measure (*Maturity*) captures the duration of bank assets and measures variation in liquidation values that comes from differences in banks' exposure to the interest rate increases preceding the SVB failure (e.g., Drechsler, Savov, and Schnabl, 2021): the longer the asset duration, the greater the discount on assets' sales relative to their value on the balance sheet.[6]

Our liability-side measures, (iii) the fraction of deposit financing that is uninsured (*%Uninsured*) and (iv) the logarithm of the number of uninsured depositors (*NumUninsured*), capture variation in panic-run motives from cross-sectional differences in bank depositor base. Intuitively, an uninsured depositor has little or no incentive to withdraw early when she knows that the bulk of her bank's depositors have low incentives to withdraw early because they are covered by deposit insurance; her fear of withdrawals by others would increase as *%Uninsured* increases. Further, holding *%Uninsured* constant, coordination failures are more likely if the same amount of uninsured deposits is held by a larger number of uninsured depositors. In the extreme, coordination issues vanish when the entire deposit amount is held by just one uninsured depositor.

We find that banks more vulnerable to depositor coordination failures are more likely to issue public disclosure following the collapse of SVB. A one standard deviation increase in *Maturity* (*Asset Illiquidity*) is associated with a 23% (13%) increase over the unconditional probability of public disclosure. The economic magnitude is the strongest for the number of uninsured depositors: a one standard deviation increase in *NumUninsured* is associated with a 45% increase over the unconditional probability of disclosure. As to *%Uninsured*, we find that its own independent effect is insignificant, but it amplifies the effect of *NumUninsured*: a one standard

by Drechsler, Savov, Schnabl, and Wang (2023) confirms that (market) rate-driven declines in loan exit price can also trigger panic-based withdrawals just like an increase in liquidity discount.

[6] Conceptually, deposit runs due to low asset illiquidity and runs due to mark-to-market losses in assets are similar in that they stem from the fear that the bank will not have enough liquid cash to meet withdrawal demands.

deviation increase in *%Uninsured* amplifies the impact of *NumUninsured* from a 45% to 58% increase over the unconditional likelihood of disclosure. This amplification is theoretically expected. When *%Uninsured* is low, concerns about withdrawals by other depositors are not significant even if the number of uninsured depositors is high: each depositor knows that even if many other depositors withdraw, the bank is able to pay the amounts from its liquid resources; such concerns amplify as uninsured deposit financing (i.e., *%Uninsured*) increases.

In addition to coordination motives, we also examine the role of banks' profitability and solvency in their disclosure strategies. Traditional theories of voluntary disclosures predict that when SVB's collapse increases investors' uncertainty about banks' solvency, banks are more likely to disclose, especially those with weak profitability.[7] To assess this prediction, we use two variables to capture banks' solvency profile—profitability (*ROE*) and capital ratio. Consistent with this prediction, we find that banks with lower profitability (ROE), and thus posing greater uncertainty about solvency, are significantly more likely to disclose. However, the economic magnitude relative to that for coordination motives is lower: a one standard deviation decrease in *ROE* is associated with a 6% increase over average disclosure probability, compared to increases of 9%, 22%, and 51% for *Asset Illiquidity*, *Maturity*, and *NumUninsured*, respectively. In addition, the coefficient on capital ratio is nearly zero and statistically insignificant.

The above results indicate that coordination motives play a strong role in banks' disclosure strategy following the SVB failure. Specifically, banks that are vulnerable to coordination failures are more likely to issue public disclosures after the SVB collapse. The latter finding is consistent with He and Manela (2016) who show that public disclosures can crowd out inefficient private information collection about asset liquidation values that can otherwise result in panic runs. Media

[7] See, for example, Proposition 3 of Jung and Kwon (1988).

accounts suggest that such information acquisition was rampant and contributed to depositor unease in the aftermath of SVB collapse with concerned stakeholders scrutinizing footnote disclosures in annual reports to determine the decline in bank asset liquidation values caused by the steep increase in interest rates.[8] We conduct three analyses to determine if banks disclose to curtail such information acquisition.

We first examine the disclosure content. He and Manela (2016) predict that banks would emphasize aspects of performance that help establish their solvency and would be silent about information about asset liquidation values, especially if they can appear weak on that dimension. Our descriptive analyses of disclosure content confirm these predictions. We find that among the disclosing banks, those with higher profitability and capital ratios are more likely to discuss profits and capital ratios in their disclosure, whereas those with lower profitability and capital ratios resort to qualitative disclosures with more positive tones. We also find evidence of silence regarding information about liquidation values: banks with greater *Maturity*—and therefore possibly more unrealized losses due to interest rate increases preceding the SVB failure—are less likely to mention unrealized gains/losses, interest rates, or asset duration in their disclosures.

Second, we explore patterns in the timing of disclosures. If banks use voluntary disclosures to proactively crowd out depositor private information production, we expect them to release disclosure earlier to leave less time for depositors to privately collect information. Using survival time models, we find that conditional on a disclosure release, banks with higher *%Uninsured* are

[8] For example, the Wall Street Journal (Weil, 2023) reports that "*[i]nvestors have been scrutinizing lenders' footnote disclosures intensely since the collapse of Silicon Valley Bank, looking for big differences between the fair values and balance-sheet values of banks' assets, as a way to gauge banks' financial strength.*" Under US GAAP, balance sheet values approximate value-in-use and fair values (disclosed in footnotes by public banks) approximate liquidation values (see Chen, Vashishtha, and Wang (2024) for detailed discussion). As another example, a user on Seeking Alpha commented that she read the 10K of PacWest Bancorp and "*noted the estimated fair value of the loans held for investment was very close to the carrying value*." (https://seekingalpha.com/article/4600532-pacwest-bancorp-heading-into-an-uncertain-weekend).

more likely to disclose sooner, but *Maturity, Illiquidity,* and *NumUninsured* do not matter for disclosure timing. This is in line with our earlier evidence that *%Uninsured* shapes disclosure mainly by amplifying the effect of other factors. That is, while *Maturity, Illiquidity,* and *NumUninsured* predict disclosure issuance, high *%Uninsured* lends urgency to the matter by making banks disclose *sooner*.

Finally, we examine if the disclosure effects are stronger for banks that exhibit an observable increase in information acquisition by depositors. Using abnormal Google search volumes in the three-day window following the SVB collapse as an indicator of intensity information acquisition, we test if the predictive ability of panic measures for disclosure likelihood is stronger for banks that observe greater information acquisition increase in the immediate aftermath of SVB. Note this test can detect the mechanism only for those banks that respond *after* observing an increase in information acquisition but not for those that respond in anticipation to stamp out the information acquisition *ex ante*. Point estimates for all panic-run measures are in the predicted direction with meaningful magnitudes, and the effect is statistically significant for our strongest predictor of disclosure increase: *NumUninsured*.

Overall, our results indicate that the fear of depositor coordination failures plays an important role in shaping banks' communication strategies in times of crisis. Given that many banks remained silent during this episode, however, one might wonder whether concerns about coordination failures are relevant only for a small subset of banks that engage in particularly high levels of maturity or liquidity transformation. It is important to note that, in the immediate aftermath of SVB's failure, regulatory bodies responded with strong measures—such as implicit guarantees and liquidity support—to prevent runs on other banks.[9] These interventions may have

[9] As discussed in Section 3, the Federal Deposit Insurance Corporation declared a blanket guarantee on all deposits at SVB on March 12, 2023.

reassured depositors at many institutions, except perhaps those with especially high exposure to maturity or liquidity risk.[10] If that is the case, the true impact of coordination motives on banks' communication strategies (i.e., the effect in the absence of government intervention) may be more widespread than our findings suggest.

A related question is to what degree coordination motives—and thus our findings—are relevant outside of the 2023 regional banking crisis. Analyzing two centuries of bank run episodes since 1800, Jamilov, König, Müller, and Saidi (2024) find that many bank runs cannot be explained by fundamentals and reflect an element of panic. Using a large sample of U.S. banks, Chen, Goldstein, Huang, and Vashishtha (2024) document that depositors' response to earnings information partly reflects coordination failures.[11] Our findings complement these studies in highlighting the importance of considering coordination motives when designing appropriate information management policies in times of crisis.

2. Related Literature and Contributions

Our paper is related to three streams of research. It is closely related to studies on information management by banks in times of crisis (e.g., Vyas, 2011; Flannery, Kwan, and Nimalendran, 2013; Bischof, Laux, and Leuz, 2021). Our paper contributes to this literature by providing the first large sample evidence on the relation between banks' vulnerability to panic-induced depositor runs and their voluntary disclosure strategies. As discussed above, our findings

[10] In addition, disclosure is not without cost for banks. Prior theoretical and empirical literature have shown that opacity can benefit banks by allowing them to create deposits that better serve as money-like claims (e.g., Bouvard et al., 2015; Dang et al., 2017; Goldstein and Leitner, 2018; Chen et al., 2022). We find that banks that remained silent faced significantly lower risk of coordination failure than those that disclosed, suggesting that the benefits from disclosure may not justify the cost for these banks.

[11] Evidence of coordination failures has also been documented in many other settings, including investors in equity funds (Chen, Goldstein, and Jiang, 2010), corporate bond mutual funds (Goldstein, Jiang, and Ng, 2017), money market funds (Schmidt, Timmermann, and Wermers, 2016), and the life-insurance industry (Foley-Fischer, Narajabad, and Verani, 2020).

are relevant for information management to prevent a widespread crisis from taking place, an important issue for both bank management and regulators. Other studies in this area primarily focus on firms' choices in mandatory disclosures during crises and do not examine how these choices are related to banks' vulnerability to runs.[12] Another related study is Sandri, Grigoli, Gorodnichenko, and Coibion (2023), who survey retail depositors after the SVB collapse and find that information about FDIC insurance and communication about bank stability by the Federal Reserve can reassure depositors. We complement Sandri et al. (2023) by studying banks' actual disclosure practices and how these choices are influenced by banks' vulnerability to panic runs.

Our paper also complements the literature on the role of regulatory disclosure for financial stability. Most papers in the literature offer theoretical analyses of the effectiveness of regulatory disclosures in preventing and mitigating crisis.[13] The few empirical studies on the subject offer mixed evidence. For example, among the studies examining the pre-FDIC era, Granja (2013) finds that the adoption of state-level requirements to report financial statements in local newspapers is associated with greater stability and development of commercial banks during normal times. However, Anderson and Copeland (2023) find that ceasing the publication of banks' balance sheet data reduced deposit outflows during the Great Depression of 1933. Similarly, Gorton and Mullineaux (1987) and Kroszner (1999) report that city clearinghouses suppressed the disclosure of their member banks during the banking crisis in the nineteenth century to avert a more

[12] For example, Vyas (2011) provides evidence that 66 financial firms, including 21 large banks, delayed asset write-downs during the 2008 Great Financial Crisis (GFC). Similarly, Bischof et al. (2021) find that during the GFC, the sample of twenty major U.S. and European banks do not provide timely or precise disclosures about their exposures to troubled assets. Bischof and Daske (2013) show that during the Eurozone debt crisis period, mandatory disclosure of banks' stress test results causes banks to issue more voluntary disclosure about their sovereign risk exposures. While these studies suggest that banks tend to remain opaque during crises, Flannery, Kwan, and Nimalendram (2013) find no evidence that equity markets perceived banks as more opaque during the crisis periods than the non-crisis period.

[13] See Goldstein and Sapra (2014) for a survey on this literature.

widespread crisis. Our study emphasizes the importance of considering coordination motives and banks' own disclosure responses when designing appropriate regulatory disclosures.

Lastly, our study contributes to the vast literature exploring determinants of voluntary disclosure and corporate transparency for both financial and non-financial firms.[14] The function of disclosure (or lack thereof) in this literature is to influence capital providers' beliefs about disclosing firms' fundamentals, which is the main way disclosure determines economic outcomes for firms and investors. For banks, however, outcomes depend not only on depositors' beliefs about fundamentals but also on their beliefs about actions of other depositors. As a result, public signals have a dual informational role in helping depositors forecast not only fundamentals but also actions of other depositors. There is little evidence in prior work on whether coordination motives (i.e., the desire to shape depositors' beliefs about other depositors) meaningfully influence banks' actual disclosure practices. To the best of our knowledge, our paper is the first to document evidence that coordination motives play an important role in banks' disclosure choices in times of crisis.

3. Background and Conceptual Underpinnings

3.1 Background on the Regional Banking Crisis

The regional banking crisis of 2023 started with the announcement on March 8, 2023, by Silvergate Capital, a bank focusing on deposits from crypto firms , that it had experienced a run on deposits and would shut down and liquidate all its assets. On the same day after the market close, Silicon Valley Bank, the 16th largest bank in the US by assets at the time, disclosed that it had taken a $1.8 billion loss from selling some of its investment securities and had planned a stock sale to shore up its capital. The market was spooked by the announcements. The share price of

[14] The literature is too large for us to review. See Beyer, Cohen, Lys, and Walther (2010) for an excellent survey.

SVB Financial, the parent organization of SVB, plummeted by 60% when the market opened in the morning of March 9. Major depositors of SVB, most of them startup and venture-capital customers, attempted to withdraw $42 billion out of the bank on the same day. By midday March 10, after failing to find a buyer, Silicon Valley Bank was put into receivership under the Federal Deposit Insurance Corporation (FDIC).

The news of SVB failure set in motion loss of depositor confidence at other regional banks, which lost $220 billion in deposits over the subsequent two weeks. The spillovers were particularly severe for banks, such as the Signature Bank and the First Republic Bank, that, like SVB, relied heavily on uninsured deposit funding and had significant unrealized losses on assets due to interest rate increases. On March 12, 2023, regulators announced the decision to put Signature Bank under receivership of the FDIC. Further, to stem deposit outflows and stabilize the banking system, the Federal Reserve, the U.S. Treasury, and the FDIC jointly announced blanket insurance of all deposits at both SVB and Signature Bank and created the Bank Term Funding Program to provide banks with short-term liquidity funding.

On March 16, 2023, First Republic Bank, which had significant unrealized losses on its loans and had experienced large deposit outflows, announced that it received $30 billion in deposit from a consortium of 11 major US banks to help its liquidity situation. US Treasury Secretary Yellen testified at Congress that America's banks remain "sound." On March 21, Yellen indicated that regulators could protect deposits at other banks if needed, putting a temporary stop to the crisis. The crisis resumed on April 24, 2023, when First Republic reported its financial results for 2023Q1 that it experienced significant loss of deposits. Its stock price declined and deposit outflows of more than $10 billion occurred over the next several days. On May 1, 2023, First Republic was taken into receivership by the FDIC.

3.2. Conceptual Underpinnings

The three failed banks during the crisis—SVB, Signature, and First Republic—shared two common features: (i) they relied heavily on uninsured deposit funding, and (ii) they experienced significant unrealized losses on their assets, indicating that the liquidation values of their assets were lower than their value-in-use. These are precisely the features that make banks vulnerable to panic-based runs (Diamond and Dybvig, 1983; Goldstein and Pauzner, 2005). When liquidation values are sufficiently below the value-in-use, depositors become concerned that if a large mass of other depositors withdraw, a bank may be forced to liquidate assets at low prices and default on depositors who are too late to withdraw. Bank-run theories show that such fears can become self-fulfilling, resulting in "panic-based" deposit withdrawals even when the bank is solvent.

Bank runs can be classic examples of coordination failures, where, due to strategic complementarity in agents' actions, economic outcomes depend not only on agents' beliefs of the fundamentals, but also on their beliefs about other agents' actions. This feature lends public signals a dual informational role whereby they help depositors forecast not only cash flows from bank assets but also actions of other depositors. The latter role of disclosure (i.e., the coordination role) makes the desirability of public communications in times of crisis theoretically ambiguous. One set of theories suggests "silence" may be desirable. For example, in a general model of strategic complementarity, Morris and Shin (2002) find that more public disclosure can serve as a focal point and increase the chance of coordination failure. Similarly, papers analyzing classical models of global games (where the agents make a binary decision much like the depositors' decision of whether or not to withdraw money from banks) find that more precise public signals can result in more run-like behaviors, especially in bad times (e.g., Rochet and Vives, 2004; Iachan and Nenov, 2015; Banjerjee and Maier, 2016).

A recent theory by He and Manela (2016), however, provides a more nuanced perspective on the link between public communications and coordination failures. In all the above models, each agent's private information is exogenously given. He and Manela (2016) enrich their set-up to study the role of depositors' private information acquisition. In their model, depositors are uncertain about banks' liquidity (i.e., asset liquidation values) and solvency (i.e., cash generating potential of assets) and can privately collect information to resolve the uncertainty. A key result in the paper is that information acquisition about liquidity is socially inefficient and can result in panic runs on solvent banks that are otherwise safe in the absence of information acquisition. Importantly, public disclosures highlighting bank solvency can "crowd out" information acquisition about liquidity and deter such panic runs. Their analysis implies that, instead of silence, banks may strategically disclose and highlight information about solvency to deter panic.

By allowing for private information acquisition about bank liquidity, He and Manela (2016) incorporate an aspect of the regional banking crisis that is important to consider. Media accounts suggest that such information acquisition was rampant in the aftermath of SVB collapse with concerned stakeholders scrutinizing disclosures about unrealized losses in annual reports to determine the decline in bank asset fair values (see Footnote 9 for examples). Some observers suggest that attention to these disclosures was an important driver of the ensuing banking crisis.[15] If banks were sufficiently concerned about depositors acquiring information about their liquidation

[15] For example, Gary Gorton notes: "SVB's issue wasn't that it held Treasuries in its asset portfolio…The problem was that its depositors became aware of and concerned about these large unrealized losses, which prompted a run on deposits so large that SVB was forced to sell assets to meet deposit outflows, thereby turning these unrealized losses into realized ones. *Basically, if nobody knew what SVB held in its asset portfolio, the run on its deposits wouldn't have occurred.* For all the focus on bank transparency, the reality is that banking traditionally has been an opaque business, and opacity in banking is desirable. A bank's asset portfolio should be something only its bank examiners see and monitor to prevent undue panic." Page 16 of *Global Macro Research* by Goldman Sachs*, Issue 117, April 3, 2023*. Emphasis added.

values, instead of opting for silence, they may publicize information about solvency to thwart information acquisition about liquidity.

4. Data

We obtain data on bank characteristics from Call Reports disseminated by the Federal Financial Institutions Examination Council (FFIEC). Call Reports contain quarterly data on all commercial banks' income statements and balance sheets. We use data from Call Reports to construct proxies for bank fragility and other control variables. Because our focus is on disclosure following SVB, we collect data for 2022 Q4, which is the last quarter prior to the SVB collapse (March 10th, 2023). We winsorize all continuous variables at the 1% and 99% levels. Our sample consists of 4,428 bank observations.

In addition, we hand-collect data on banks' disclosure response in the 30-day window following the SVB failure on March 10th, 2023. This window ends before Call Reports were released for 2023 Q1—typically 30 days after the end of the calendar quarter (Badertscher, Burks, and Easton, 2018)—and thus allows us to examine whether banks voluntarily use public disclosure to reduce depositor panic risk before a wealth of financial information is released through mandatory disclosures. For convenience, we refer to banks' public disclosure response to the SVB failure as *SVB Disclosure*.

To determine whether or not a bank provides an SVB disclosure, we use the following procedure. First, we find the website for each commercial bank in our sample. Second, we search for news/press releases on the website following March 10th, 2023. If the bank provides a news release within thirty days of March 10th, 2023 that discusses the bank's exposure to SVB or related industry events, we download the news release, indicate that the bank has an SVB disclosure, and

record the news release date if available.[16] Third, if we do not find a news release, we then search the website for alternative forms of communication—such as blog posts, letters from the president or CEO—that the bank may use to discuss its exposure to SVB. If we find such communication, we download the document, indicate that the bank has an SVB disclosure, and record the document release date if available. [17] If there are multiple SVB disclosures, we keep the earliest one.

Appendix B provides several examples of SVB disclosures appearing on bank websites and illustrate the different ways banks communicate their exposure to SVB. Example 1 is a news release, Example 2 is a letter from the bank president, Example 3 is a blog post, and Example 4 is the transcript from a video of the president speaking about SVB posted on the bank's website.

Using data from Call Reports, we construct proxies for panic-run motives that we expect to predict the likelihood of SVB disclosure. Our first proxy, *Maturity*, captures duration mismatch and is calculated as the weighted average of the repricing maturities (i.e., the time until an asset's interest rate resets) of bank loans, securities, and short-term investments, following Drechsler et al. (2021). Specifically, the authors use data on banks' holdings of five asset categories (residential mortgage loans, treasuries and agency debt, mortgage-backed securities secured by residential mortgages, other mortgage-backed securities, and all other loans) separated into six bins by repricing maturity interval (0 to 3 months, 3 to 12 months, 1 to 3 years, 3 to 5 years, 5 to 15 years, and over 15 years). As in Drechsler et al. (2021), to calculate the repricing maturity of a given asset category, we assign the interval midpoint to each bin (and 20 years to the last bin) and take

[16] To be clear, a bank can provide an SVB disclosure even if it does not explicitly mention "SVB" as part of the disclosure (see Example 4 in Appendix B).

[17] For 108 of the disclosures, we are unable to find the exact date when the disclosure was uploaded to the website. We manually read these disclosures and assume they were issued within 30 days of March 10th when they contain one or more of the phrases such as "Last Friday," "Last Week," "Recent News," "Recent Events," "Current Events," "Current Economic Environment," etc. We believe the assumption is reasonable given that all disclosures with specific dates were made within 30 days.

a weighted average using the amounts in each bin as weights. *Maturity* is computed as the weighted average of the bank's repricing maturities across all of its asset categories.

Our second proxy, *Asset Illiquidity*, captures liquidity mismatch and is calculated as the weighted average of illiquid assets, semi-liquid assets, and liquid assets, following Berger and Bouwman (2009). Specifically, as in Berger and Bouwman (2009), we classify all bank assets into three categories: (i) illiquid assets (e.g., commercial real-estate loans; commercial and industrial loans), (ii) semi-liquid assets (e.g., consumer loans; residential real-estate loans), and (iii) liquid assets (e.g., cash; securities; trading assets). We then assign a weight of +1/2, 0, and -1/2 to each dollar of illiquid, semi-liquid, and liquid assets, respectively. *Asset Illiquidity* is calculated as the weighted sum of all assets.

While the above two proxies come from the asset-side of the balance sheet, our next two proxies come from the liability-side of the balance sheet and specifically capture the extent of uninsured deposits. *%Uninsured* is the fraction of deposits that are uninsured, where insured deposits are accounts of $250,000 or less. *NumUninsured* is the natural logarithm of one plus the number of uninsured depositors.

We also use data from Call Reports to construct the following variables, most of which will serve as control variables. We measure a bank's solvency profile using two proxies: *ROE* and *Capital Ratio*. *ROE* is total net income in 2022 divided by average quarterly equity capital. *Capital Ratio* is equity capital divided by total assets. *Public* is an indicator variable equal to one if the bank is publicly traded. *Ln(Assets)* is the natural logarithm of one plus total assets. *C&I Loans* is the fraction of total loans that are commercial and industrial loans. *RE Loans* is the fraction of total loans that are secured by real estate. *Wholesale Funding* is wholesale funds divided by total assets.

Finally, we proxy for the intensity of information acquisition in the immediate aftermath of SVB using abnormal google search volume intensity (*Abnormal SVI*) following Da, Engelberg, and Gao (2011). Specifically, *Abnormal SVI* is the natural logarithm of one plus the average daily google search volume in the three-day window (3/10/23–3/12/23) minus the natural logarithm of one plus the median daily google search volume during the previous 8 weeks. We obtain data on google search volume from Google Trends. Using this measure, we test if the predictive ability of panic measures for disclosure likelihood is stronger for banks that observe greater information acquisition increase in the immediate aftermath of SVB.

Table 1 reports summary statistics of bank characteristics. The mean repricing maturity is 6.60 years. The average percentage of uninsured deposits is 41%. The mean *ROE* is 12%. The average capital ratio is 0.10. In our sample, 8% of banks are publicly traded; although few, public banks are much larger and account for 56% of the aggregate banking assets in our sample. 13% of total loans are commercial and industrial loans, while 42% of total loans are real estate loans. The mean *Abnormal SVI* is positive, indicating that there is an increase in google search activity on average following the SVB collapse. The median and third quartile of *Abnormal SVI* are zero as most of the banks in our sample are small regional banks where Google Trends will return a zero value for the bank's search activity (see Da et al., 2011 for more discussion on this).

Table 2 reports summary statistics on the frequency of SVB disclosure in our sample. It shows that 9.5% of the sample banks provide SVB disclosure. The frequency is 8.8% for private banks but nearly doubles to 18% for public banks (numbers untabulated), which account for the majority of aggregate banking assets. Note that this increase in disclosure frequency for public banks may be because public banks differ from private banks along a number of dimensions including their size, loan portfolio, and depositor composition.

Table 2 also provides some descriptive characteristics of the disclosure. Over 70% of the disclosures are released within 5 days of SVB failure and the longest time to disclosure is 22 calendar days. For banks that choose to provide SVB disclosures, they tend to adopt a positive tone (average *Tone* = 0.16 > 0). The content of SVB disclosures varies across banks, and we focus on discussions for the following topics (not mutually exclusive): unrealized values (3%), asset duration (17%), interest rates (11%), earnings (10%), and capital ratios (12%).

5. Results

This section contains our main empirical analyses. We first examine the factors associated with SVB disclosure. We then analyze the content and timing of these disclosures. We further discuss whether the disclosure effects are stronger for banks that exhibit an observable increase in information search by depositors.

5.1. Determinants of SVB Disclosure

In this section, we examine the determinants of SVB disclosure. We are especially interested in understanding the extent to which concerns for panic-based runs (i.e., coordination motives) can explain banks' disclosure choices, while holding constant the solvency profile and other bank features. As discussed in Section 4, we employ four measures for coordination motives: (i) asset duration (*Maturity*), (ii) illiquidity of assets (*Asset Illiquidity*), (iii) the fraction of deposit financing that is uninsured (*%Uninsured*), and (iv) the logarithm of the number of uninsured depositors (*NumUninsured*).

We begin with an exploratory analysis of the relations between our proxies for coordination motives and the likelihood of SVB disclosure without imposing any functional form assumptions. We first examine the univariate relation between SVB disclosure and proxies for coordination

motives. We partition the sample banks into deciles by their coordination motive proxies and plot the average propensity of SVB disclosure in each decile in Figure 1. In the top four panels, we observe a positive relation between the likelihood of SVB disclosure and the degree of coordination motive. The relation between SVB disclosure and the number of uninsured depositors is the most salient, with a nearly monotonic increase in the probability of SVB disclosure from 0.01 in the bottom decile of *NumUninsured* to 0.23 in the top decile. In contrast, in the bottom two panels when we plot the average propensity of SVB against deciles formed based on banks' solvency profile as measured by *ROE* and *Capital Ratio*, we observe no detectable relation.

To account for differences in other bank characteristics, we next perform a semi-parametric regression of the following specification:

$$SVB\ Disclosure = f(X) + \overline{Controls} + \epsilon \quad (1)$$

where $SVB\ Disclosure$ is an indicator variable for whether bank i had an SVB disclosure, X is one of the four proxies for coordination motives, and $\overline{Controls}$ include the set of control variables that we will discuss below following Equation (2). In estimating Equation (1), we follow prior studies and use Robinson's (1988) estimator implemented with Gaussian local kernel regressions.

Figure 2 presents the estimation results. Consistent with the univariate relations we observed in Figure 1, it shows a positive relation between SVB disclosure and *Maturity*, *Asset Illiquidity*, and *NumUninsured*, and there is no detectible relation between SVB disclosure and *Capital Ratio*. In contrast, the relation between SVB disclosure and *%Uninsured* becomes muted after we introduce the control variables, whereas that between SVB disclosure and banks' earnings performance (*ROE*) is negative, indicating that banks with poor financial performance are more likely to issue SVB disclosure.

While intuitive, the semiparametric plots do not allow us to conduct formal tests of statistical differences in disclosure behavior across banks with different exposure to risk of depositor coordination failures. For that, we rely on traditional linear regression and estimate the following specification:

$$SVB\ Disclosure = \beta_0 + \beta_1 Coordination\ Motives + \mathbf{\Gamma}\overline{Controls} + \epsilon \qquad (2)$$

where $SVB\ Disclosure$ is an indicator variable for whether the bank issued a SVB disclosure, *Coordination Motives* are our measures of coordination motives including *Maturity*, *Asset Illiquidity*, *%Uninsured*, and *NumUninsured*, $\overline{Controls}$ is the set of control variables, including *ROE*, *Capital Ratio*, *Public*, *Ln(Assets)* and its squared term, *C&I Loans*, *RE Loans*, and *Wholesale Funding*. The coefficient of interest is β_1, which captures how banks' disclosure decisions are shaped by coordination motives. In all regressions, we standardize all continuous variables for ease of interpretation.

Table 3 reports the results from estimating Equation (2) when we rely on the asset-side measures of coordination motives: *Maturity* and *Asset Illiquidity*. Column (1) shows a positive and statistically significant association between repricing maturity and the likelihood of SVB disclosure: a one standard deviation increase in repricing maturity is associated with a 21% increase over the unconditional probability of SVB disclosure.[18] Column (2) shows a positive and statistically significant association between asset illiquidity and the likelihood of SVB disclosure: a one standard deviation increase in asset illiquidity is associated with a 9% increase over the unconditional probability of SVB disclosure. Column (3) includes both repricing maturity and asset illiquidity in the same regression specification and shows that both variables continue to have

[18] To get this, we take the coefficient estimate 0.0204 and divide by the unconditional probability of SVB disclosure which is 0.095.

a positive and statistically significant association with the likelihood of SVB disclosure: a one standard deviation increase in *Maturity* (*Asset Illiquidity*) is associated with a 23% (13%) increase over the unconditional probability of SVB disclosure.

Turning to the variables capturing banks' solvency profile, we find that the coefficient on capital ratio is close to zero and statistically insignificant across all specifications. This result is consistent with the analyses in Figures 1 and 2, which also revealed no differences in disclosure behavior of banks with different capital ratios. The coefficient on *ROE* is negative and significant. This result is consistent with the idea that banks with poor accounting profitability, and thus posing greater uncertainty about solvency, are more likely to publicly disclose. Compared to the effect of variables capturing coordination motives, however, the economic magnitude for *ROE* is lower. For example, estimate in Column (3) shows that a one standard deviation decrease in *ROE* is associated with an 8% increase over the unconditional likelihood of SVB disclosure.

We also note that there is a positive and statistically significant coefficient on *Ln(Assets)* but a negative and statistically significant coefficient on $Ln(Assets)^2$. One interpretation for this non-monotonic relation is that large national banks may be less affected by the SVB failure, while small community banks may prefer to address concerns through private communication with their clients than public disclosure. Consequently, it is the medium-sized regional banks that are most likely to resort to public disclosure.[19]

In Table 4, we present the results from estimating Equation (2) with the liability-side measures of coordination motives: *%Uninsured* and *NumUninsured*. Consistent with the semi-parametric plot, Column (1) shows no statistically significant association between *%Uninsured* and the likelihood of SVB disclosure. Column (2) shows a positive and statistically significant

[19] Note that once other bank characteristics are accounted for, *Public* no longer has a positive association with the likelihood of SVB disclosure.

association between *NumUninsured* and SVB disclosure: a one standard deviation increase in *NumUninsured* is associated with a 45% increase over the unconditional probability of SVB disclosure. Column (3) shows no statistically significant association between the number of *insured* depositors (*NumInsured*) and the likelihood of SVB disclosure. This is in line with expectations, as the number of insured depositors should not increase the risk of panic runs.

In Column (4), we introduce an interaction term between *%Uninsured* and *NumUninsured* to explore if the effect of *%Uninsured* operates by amplifying the effect of *NumUninsured*. This amplification is theoretically expected. When *%Uninsured* is low, concerns about withdrawals by other depositors are not significant even if the number of uninsured depositors is high: each depositor knows that even if many other depositors withdraw, the bank is able to pay the amounts from its liquid resources; such concerns amplify as the contribution of uninsured deposit financing (i.e., *%Uninsured*) increases. Column (4) shows a positive and statistically significant interaction effect between *%Uninsured* and *NumUninsured*: a simultaneous one standard deviation increase in *%Uninsured* and *NumUninsured* is associated with a 58% increase over the unconditional probability of SVB disclosure. This suggests that although the fraction of uninsured deposits has an insignificant independent effect on SVB disclosure, it serves to further amplify the effect of the number of uninsured depositors.

Similar to Table 3, the effect of variables capturing solvency profile continues to be weak. The coefficient on capital ratio is statistically insignificant in all regressions and the coefficient on *ROE* is significant only in Column (1) with smaller economic magnitude compared to coordination motive variables. In Column (1), one standard deviation decrease in *ROE* is associated with a 9% increase over the unconditional likelihood of SVB disclosure.

To provide further evidence on the role of coordination motives, we also examine whether the effect of asset side coordination motive variables varies with the degree of *NumUninsured* or *%Uninsured*. As argued in Chen, Goldstein, Huang, and Vashishtha (2024), the risk of coordination failures from high *Asset Illiquidity* or *Maturity* should be amplified for banks with higher *NumUninsured* or *%Uninsured*. Intuitively, for banks with low *NumUninsured* or *%Uninsured*, there is little incentive to run even if the assets command low liquidation values due to high *Asset Illiquidity* or *Maturity*: an uninsured depositor knows that even if other uninsured depositors withdraw, cash withdrawals will not be large enough to trouble even a bank with low liquidation values. However, the depositor would increasingly get more concerned about low liquidation values as *%Uninsured* or *NumUninsured* increases.

Table 5 provides tests of the above predictions by including interaction terms between asset-side and liability-side proxies of coordination motives. Column (1) shows a positive and statistically significant interaction effect between repricing maturity and the number of uninsured depositors: a simultaneous one standard deviation increase in *Maturity* and *NumUninsured* is associated with a 83% increase over the unconditional probability of SVB disclosure.[20] Column (2) shows a positive and statistically significant interaction effect between asset illiquidity and the number of uninsured depositors: a simultaneous one standard deviation increase in *Asset Illiquidity* and *NumUninsured* is associated with a 79% increase over the unconditional probability of SVB disclosure. Column (3) shows a statistically insignificant interaction effect between *Maturity* and *%Uninsured*. Column (4) shows a positive and statistically significant interaction effect between *Asset Illiquidity* and *%Uninsured*, consistent with the findings in Table 4 where we found that *%Uninsured* has no significant independent effect but amplifies the effects of other factors.

[20] To get this, we sum the coefficients 0.0124, 0.0241, and 0.0419, and divide by the unconditional probability of SVB disclosure which is 0.095.

Overall, the analysis in this section indicates that managers of banks vulnerable to panic-runs on average perceive the use of public communication to be effective in curbing depositor panic. Two observations are worth noting. First, a large fraction of the banks chooses not to offer disclosures discussing their exposure to the SVB failure, suggesting that these banks perceive the costs of disclosure to be higher than the benefits. That disclosures are costly to banks is consistent with findings from both prior theory and empirical research indicating that banks can benefit from opacity, as it allows banks to produce deposits that better serve as money-like claims (Bouvard et al., 2015; Dang et al., 2017; Goldstein and Leitner, 2018; Chen et al., 2022). The benefits of disclosure to the silent banks can be low, either because they are not as vulnerable to panic-runs or because of the implicit guarantees and support offered by regulatory bodies in the immediate aftermath of the crisis. Thus, in the absence of government intervention, the link between exposure to coordination failures and disclosure is likely stronger than what we find. Second, our findings are consistent with He and Manela (2016) who show that public disclosures can crowd out inefficient private information collection about asset liquidation values, which can otherwise result in panic runs. In the rest of the paper, we provide three analyses to determine if banks disclose to curtail such information acquisition.

5.2. SVB Disclosure Content

We first examine the disclosure content. He and Manela (2016) predict that banks would emphasize aspects of performance that help establish their solvency and would be silent about asset liquidation values, especially if they can appear weak on that dimension.

We start by exploring discussions related to liquidation values. In the regional banking crisis, the declines in liquidation values that received scrutiny primarily relate to interest rate increases preceding the SVB collapse. These declines would manifest in the form of unrealized

losses and would be higher for banks that hold assets with greater duration. Accordingly, we create three indicator variables that capture discussions about (i) unrealized losses, (ii) asset duration, and (iii) interest rates. We measure these variables using textual search of key words that indicate these discussions. All variables are defined in Appendix A. We then examine the associations of these indicator variables with *Maturity*. We expect banks with high *Maturity* to be less likely to include discussions pertaining to liquidation values as they are more likely to have high unrealized losses from interest rate increases. Table 6, Columns (1)-(3) present the results. Consistent with our expectation, we find that banks with higher maturity are less likely to include discussions about unrealized gains/losses, asset duration, or interest rates.

We next explore discussion of information related to bank solvency. To measure discussions on this dimension, we use indicators for discussion about earnings and capital ratios, as well as a lexicon-based sentiment measure to assess the tone of the qualitative discussion. Tone is measured such that higher values indicate more positive and optimistic discussion. We expect that banks with higher earnings and capital ratios will include discussions emphasizing these metrics and banks with low earnings and capital ratios will provide qualitative discussions with positive tones. We test these predictions by examining the associations of these discussion variables with *ROE* and *Capital Ratio*, using both continuous measures as well as indicator variables for above median values. Columns (4)-(7) present the results for discussion of earnings and capital ratios. Banks are significantly more likely to discuss earnings and capital ratios when these metrics are above the sample median. Columns (8) and (9) present the results for tone. The results show that tone is significantly negatively associated with *ROE*. These results suggest that banks emphasize earnings and capital ratios when they appear good on these metrics, otherwise they resort to qualitative discussions with stronger positive tones.

Overall, the results from the analysis of disclosure content regarding both liquidation values and solvency are consistent with He and Manela (2016). Banks are likely to be silent about liquidation values when they are weak in that dimension. Banks emphasize fundamental strengths in the disclosures, but customize that discussion depending on their profitability and capital ratios.

5.3. SVB Disclosure Timeliness

We next explore patterns in the timing of disclosures. Although prior theoretical work has not formally explored the effects of coordination motives on disclosure timing, if banks use voluntary disclosures to proactively crowd out depositor private information production, we expect them to release disclosure earlier to leave less time for depositors to privately collect information. To evaluate this prediction, we estimate the following parametric survival-time model:

$$\#\ Days\ Until\ SVB\ Disclosure = \alpha_0 + \alpha_1 Maturity + \alpha_2 Asset\ Illiquidity + \alpha_3 \%Uninsured + \alpha_4 NumUninsured + \boldsymbol{\Lambda}\overline{Controls} + \epsilon. \quad (3)$$

We estimate this model using the generalized gamma distribution for the survival times, which allows for a flexible hazard function without imposing restrictive assumptions on its shape (Cleves, Gould, and Marchenko, 2016). We include the same control variables as in Equation (2). The coefficients of interest are α_1, α_2, α_3, and α_4, which are expected to be negative if coordination motives also influence the timing of the disclosures.

Table 7 reports the results from estimating Equation (3). Column (1) presents the estimates without the control variables. Banks with higher *%Uninsured* are more likely to disclose sooner, but *Maturity, Illiquidity,* and *NumUninsured* do not matter for disclosure timing. This is in line with our earlier evidence that *%Uninsured* affects disclosure mainly by amplifying the effect of

other factors. That is, while *Maturity, Illiquidity,* and *NumUninsured* predict disclosure issuance, higher *%Uninsured* enhances this effect by making banks disclose *sooner*.

Column (2) shows that including control variables does not change the inferences. The coefficient on *%Uninsured* remains statistically significant with virtually no change in magnitude, and the effects of *Maturity*, *Asset Illiquidity*, and *NumUninsured* remain insignificant. In line with our earlier analyses, we find that the coefficients on both *ROE and Capital Ratio* are statistically insignificant, suggesting solvency variables have little explanatory power for disclosure timing.

5.4. SVB Disclosure and Observable Information Acquisition

Finally, we examine if the disclosure effects are stronger for banks that exhibit an observable increase in information acquisition by depositors. Using abnormal google search volumes in the three-day window following the SVB collapse as an indicator of intensity of information acquisition (*Abnormal SVI*), we test if the predictive ability of panic measures for disclosure likelihood is stronger for banks that observe greater information acquisition increase in the immediate aftermath of SVB using the following regression specification:

$$SVB\ Disclosure = \delta_0 + \delta_1 High\ Abnormal\ SVI \times Coordination\ Motives + \delta_2 High\ Abnormal\ SVI + \delta_3 Coordination\ Motives + \boldsymbol{\zeta}\overline{Controls} + \epsilon. \quad (4)$$

Coordination Motives is one of our proxies for coordination motives: *Maturity*, *Asset Illiquidity*, *%Uninsured*, and *NumUninsured*. We include the same control variables as in Equation (2). The coefficient of interest is δ_1 which is expected to be positive if greater information search increases the predictive ability of panic measures for disclosure likelihood.

An important research design choice relates to the definition of *High Abnormal SVI*. As discussed earlier, most banks in our sample are small regional banks for which Google Trends

returns a zero value for the bank's search activity (see Da et al., 2011 for more discussion on this). Confirming this issue, the median and third quartile of *Abnormal SVI* are zero. Therefore, to isolate cases of meaningful jump in information acquisition, we define *High Abnormal SVI* as an indicator variable equal to one if *Abnormal SVI* is in the top decile.

The above test has significant limitations. First, as the above discussion indicates, abnormal google search volumes are an imperfect indicator of private information acquisition particularly in our setting that involves regional banks for which depositor information acquisition may not reflect in google searches. Second, and perhaps more importantly, this test has low power because it can detect the mechanism only for those banks that respond *after* observing an increase in information acquisition and not for those that respond in anticipation to stamp out the information acquisition *ex ante*.

Table 8 presents the results. Column (1) shows that there is a positive and statistically significant interaction effect between information search and the number of uninsured depositors: a one standard deviation increase in *NumUninsured* is associated with a 63% increase over the unconditional probability of SVB disclosure when *High Abnormal SVI* equals one but is only associated with a 46% increase over the unconditional likelihood of SVB disclosure when *High Abnormal SVI* equals zero. Columns (2)-(4) show that while statistically insignificant, the coefficients for the interaction terms between information search and the other proxies of coordination motives are positive with economic magnitudes comparable to that between *High Abnormal SVI* and *NumUninsured*. Overall, point estimates for all panic-run measures are in the predicted direction with meaningful magnitudes, but perhaps because of the power issue, this effect is statistically significant only for our strongest predictor of disclosure increase: *NumUninsured*.

6. Conclusion

Information disclosure has been viewed as an important tool to mitigate and avert financial crisis (Goldstein and Sapra, 2014). In this paper, we provide new evidence on how banks strategically use voluntary disclosure at times of an emerging crisis by examining banks' disclosure choices in the immediate days following the collapse of Silicon Valley Bank on March 10, 2023, which triggered a widespread concern about the overall stability in the U.S. banking sector and led to the demises of two additional banks.

Using a sample of hand-collected data on voluntary disclosures by more than 4,000 banks issued in the 30-day window after March 10, 2023, we find evidence consistent with banks' strategically disclosing information to coordinate depositors' beliefs and avert depositor runs. Specifically, we find that banks more vulnerable to panic runs are more likely to issue voluntary disclosures, suggesting that coordination motives play an important role in banks' disclosure decision. In exploring the mechanism, we also examine the content and timing of the disclosures, and find evidence suggesting that the public disclosures are motivated by the desire to crowd out inefficient private information production about liquidity that can trigger panic runs, as argued in He and Manela (2016).

One may wonder whether the voluntary disclosures provided by banks "worked" in the sense of reducing deposit outflows and maintaining depositor confidence in the banking system. While we acknowledge the importance of this question, our current study is not designed to address it, as the decision to disclose is an endogenous choice made by banks with sufficiently high concerns about panic runs. Our analysis focuses on the economics behind banks' voluntary disclosure decision and provides a first step towards understanding how banks manage their communication strategies during times of crisis. We leave for future research to study the nuanced

consequences of bank voluntary disclosures, which could further inform regulatory practices to enhance financial stability.

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Appendix A: Variable Definitions

This appendix provides definitions for the key variables used in our analysis.

Maturity	The weighted average of the repricing maturities of bank loans, securities, and short-term investments, following Drechsler et al. (2021). An asset's repricing maturity is the time until its interest rate resets.
Asset Illiquidity	The weighted average of illiquid assets, semi-liquid assets, and liquid assets following Berger and Bouwman (2009).
%Uninsured	The fraction of total deposits that are uninsured. Insured deposits are accounts of $250,000 or less.
NumUninsured	The natural logarithm of one plus the number of uninsured depositors.
ROE	Net income in 2022 divided by equity capital.
Capital Ratio	Equity capital divided by total assets.
NumInsured	The natural logarithm of one plus the number of insured depositors.
Public	An indicator variable equal to one if the bank is publicly traded using the CRSP-FRB link provided by the Federal Reserve Bank of New York.
Ln(Assets)	The natural logarithm of one plus total assets.
C&I Loans	The fraction of total loans that are commercial and industrial loans.
RE Loans	The fraction of total loans that are secured by real estate.
Wholesale Funding	Wholesale funds divided by total assets.
Abnormal SVI	Abnormal google search volume intensity following Da, Engelberg, and Gao (2011). Specifically, it is the natural logarithm of one plus the average daily google search volume in the three-day window (3/10/23–3/12/23) minus the natural logarithm of one plus the median daily google search volume during the previous 8 weeks.
SVB Disclosure	An indicator variable equal to one if the bank provides an SVB disclosure. Section 4 discuss our methodology for identifying SVB disclosures.
Length	The number of words in the SVB disclosure.
Tone	The sentiment of the SVB disclosure using lexicon-based sentiment analysis; when it is positive, it is closer to +1, while when it is negative, it is closer to -1. Specifically, we use the python library TextBlob to determine sentiment. TextBlob has a pre-defined lexicon of words with associated sentiment scores ranging from -1 (most negative) to +1 (most positive).
# Days Until SVB Disclosure	The number of days until the bank provides the SVB disclosure, relative to March 10, 2023.
Within n Days, n=2,3,4, 5	An indicator variable equal to one if the SVB disclosure is released within *n* days of March 10, 2023.
Discusses Unrealized Value	An indicator variable equal to one if the words "unrealized" or "fair value" are mentioned in the SVB disclosure.
Discusses Duration	An indicator variable equal to one if the word "duration" is mentioned in the SVB disclosure.
Discusses Interest Rate	An indicator variable equal to one if the words "interest rate" or "interest-rate" are mentioned in the SVB disclosure.
Discusses Earnings	An indicator variable equal to one if the word "earnings" is mentioned in the SVB disclosure.
Discusses Capital Ratio	An indicator variable equal to one if the words "capital ratio" or "tier" are mentioned in the SVB disclosure.

Appendix B: Examples of SVB Disclosures

Example 1: Pacific Western Bank News Release

Pacific Western Bank Issues End of Week Update

Company Release - 03/17/2023

LOS ANGELES, March 17, 2023 (GLOBE NEWSWIRE) -- Pacific Western Bank, the primary subsidiary of PacWest Bancorp (NASDAQ: PACW), today issued the following statement reaffirming its financial strength.

Pacific Western Bank continues to have solid liquidity, with over $10.8 billion in available cash as of March 17, 2023. Available cash exceeds total uninsured deposits. Following the announcement of the Silicon Valley Bank and Signature Bank closures, the bank experienced elevated net deposit outflows, concentrated primarily in our Venture Banking business line. Since Monday, March 13, 2023, net outflows have fallen sharply, with deposit balance fluctuations substantially stabilizing.

As of March 16, 2023, insured deposits exceed 62% of total deposits, including accounts eligible for pass-through insurance. Additionally, as of March 16, 2023, insured venture-specific deposits account for more than 77% of total venture deposits, including accounts eligible for pass-through insurance. The bank continues to have a diversified deposit base that includes commercial, community banking, homeowners associations, retail, and venture deposits, with venture deposits representing approximately 25% of total deposits as of March 16, 2023.

As previously disclosed, our risk-based capital ratios, including CET1, have been increasing for the past three quarters, including a tier 1 risk-based capital ratio of 10.61%, which is well in excess of regulatory requirements, as of December 31, 2022. Additionally, asset quality remains excellent, and the bank has experienced no significant asset quality changes since year-end, including classified assets, non- performing assets, and charge-offs.

“After a challenging week, we are encouraged that much of the volatility seems to have calmed over the past several days. We have taken numerous steps, including leveraging available collateral, over the past week to enhance and fortify our liquidity during this time. Pacific Western Bank remains a diversified bank prepared to continue delivering for our customers,” stated Paul W. Taylor, Pacific Western Bank President and CEO.

He continued, “We are also encouraged by the distinct message that government officials, regulatory agencies, and industry leaders have been communicating, expressing a clear commitment to the banking system and its depositors. We deeply appreciate our strong relationships with our customers and are well-positioned to continue meeting their needs.”

Example 2: TIAA Bank CEO Letter

As custodians of your retail and corporate deposits, our number-one job every day is ensuring the financial safety and soundness of our bank. Trust is everything in our business, and we never forget our promise to keep earning yours by managing our bank in a prudent manner.

The closure of California's Silicon Valley Bank and New York's Signature Bank by banking regulators has generated considerable media coverage and speculation about the fundamental strength of the U.S. banking industry. Like all banks, we're closely following developments at these banks and the proactive moves taken by federal banking regulators to protect deposit accounts at these institutions.

While it likely will take time to understand all the factors that led to the failure of these two banks, it's clear their unique business models – which relied heavily on serving and supporting start-up companies, venture capital firms and cryptocurrency industry participants that have been hard-hit by recent economic trends – was a major factor.

TIAA Bank has a significantly different and more traditional business model. Our approach employs effective risk strategies that reduce interest-rate risk in our portfolio and does not expose us or our clients' deposits to the kinds of economic and market risks, including those associated with potentially volatile sectors such as technology start- ups, venture capital funds and cryptocurrencies.

Our capital and liquidity reserves are strong and exceed all required levels set by banking regulators. TIAA Bank also benefits from being a privately held subsidiary of TIAA, one of only three insurance groups in the U.S. that hold the highest-possible rating from three of the four leading insurance company rating agencies for its stability, claims-paying ability and overall financial strength.

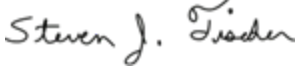
TIAA Bank has a decades-long record of consistent profitability, built on a strong capital base and conservative approach to risk-management. The safety and soundness of TIAA Bank and TIAA remains strong, even in turbulent economic times.

Our deposit base also remains strong and stable. TIAA Bank's Yield Pledge guarantees yields on many of our deposit products, which are among the top 5% of Competitive Accounts offered by other financial institutions nationwide, with no or low monthly account fees. In addition to the inherent financial strength and soundness of our bank balance sheet, a significant percentage of TIAA Bank's deposit balances qualify to be insured by the Federal Deposit Insurance Corporation (FDIC).

We know that continuing to earn your trust requires us to stay true to the principles that have always guided our bank: service, reliability, financial strength and an unwavering commitment to safeguard our bank's soundness.

All of us at TIAA Bank thank you for your trust in us and for choosing us as your bank.

Sincerely,



Steve Fischer
President and CEO
TIAA Bank

Example 3: Tompkins Community Bank Blog Post

Tompkins remains strong and secure.

Published by Tompkins Community Bank on Mar 14, 2023 9:11:39 AM

You've undoubtedly heard about the recent Silicon Valley Bank (SVB) failure, and that of several similar institutions. Anticipating you may have questions or concerns, we are posting this message to help our valued customers better understand the situation as it relates to Tompkins, and to help ease your minds.

We are a safe and sound partner. We are well capitalized, have ample liquidity, to date have always had a stable and diverse customer base who are the source of our deposits and we've had limited involvement with private equity or venture capital, and no involvement with cryptocurrency. We are FDIC insured.

We're also very different, and we think that's to the benefit of our customers. There are vast contrasts in the operating models of risky venture capital banks like SVB/other failed banks and Tompkins Community Bank. They invested heavily in start-ups and cryptocurrencies. We, quite simply, never have.

On the contrary, we are a relationship-based community bank that prides itself on knowing you, our customers, and your businesses. We have done business in our local communities for more than 185 years. We lend money almost exclusively to established, stable industries within our NY and PA footprint and we gather deposits from a diverse group including consumers, businesses and municipal entities throughout the same geographic area.

As always, we're here to help. Please feel free to reach out with questions you have about your account or any of your banking relationships, and we'll be happy to talk with you.

Example 4: Cambridge Trust Company Video Transcript

Good afternoon. My name is Denis Sheahan, President and CEO of Cambridge Trust Company. I am speaking to you today as a result of recent developments in the banking industry and with regard to the health of your deposits at Cambridge Trust Company. In recent days, sadly, two large banks have been put into receivership by the FDIC and markets are uneasy. One of these banks was heavily dependent on the innovation economy for the majority of its business and the other had a large exposure to cryptocurrency. And while these banks have failed, it is important to understand the FDIC will cover all the deposits of customers in those banks regardless of size. Of note, our business model is materially different to those institutions. At Cambridge Trust, we are a local community-based private bank and wealth management firm. We are not a national lender. We do not have significant exposure to specialized businesses. We take your deposits from our local communities and lend them responsibly in those local communities, to your neighbor or to local businesses. We are invested in our communities today as we've always been. Cambridge Trust has operated for over 130 years in a safe and sound matter. Our balance sheet is conservatively managed, and we have strong capital, strong asset quality, and robust liquidity. In fact, we have additional 2.5 billion dollars of liquidity available to us should we need it. Your deposits are insured up to FDIC limits which is generally up to $250,000 or greater depending how the accounts are structured. In addition, we have access to further insurance if that is of interest to you. As for your wealth management investment assets, Cambridge Trust does not hold these assets on our balance sheet. They are held in custody away from the bank at an independent third party, following best practices in the industry. While the recent news is unsettling, the worst thing any of us can do is panic. I advise you to speak with your banker at Cambridge Trust. We are here to help you analyze the situation and make responsible investment decisions. I greatly appreciate the trust and confidence you place in Cambridge Trust. Thank you.

Figure 1: Panic-Run Concerns and SVB Disclosure – Unconditional Estimates. These figures plot the average propensity for SVB disclosure in each decile of *Maturity*, *Asset Illiquidity*, *%Uninsured*, *NumUninsured*, *ROE*, and *Capital Ratio*.

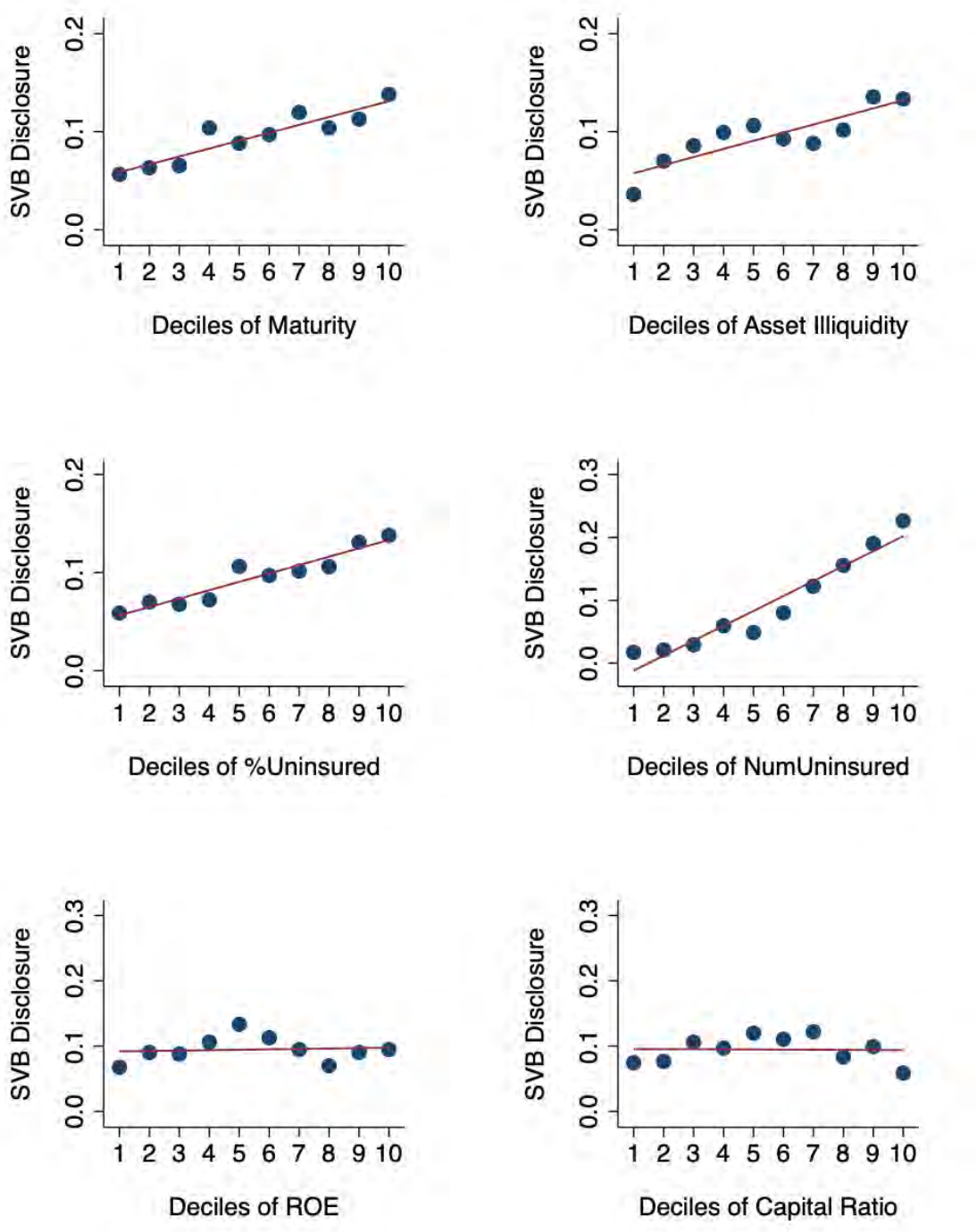


Figure 2: Panic-Run Concerns and SVB Disclosure – Semi-Parametric Estimates. This figure examines the average propensity for SVB disclosure in each decile of *Maturity*, *Asset Illiquidity*, *%Uninsured*, *NumUninsured*, *ROE*, and *Capital Ratio* using semi-parametric estimates from the Robinson (1988) estimator based on Gaussian local kernel regressions with the following control variables: *Public*, *Ln(Assets)*^{2}, *Ln(Assets)*, *C&I Loans*, *RE Loans*, and *Wholesale Funding*.

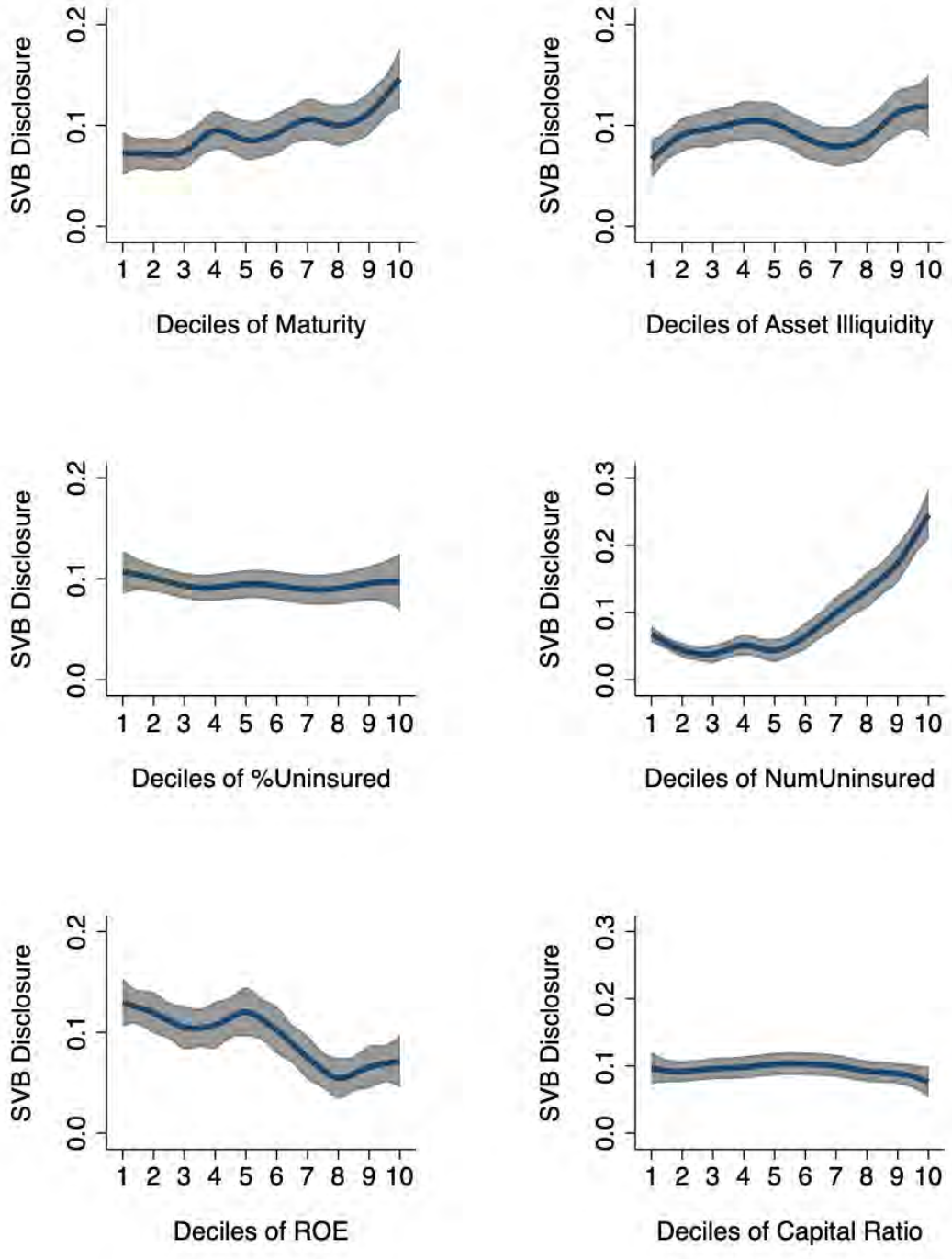


Table 1: Bank Characteristics. This table presents summary statistics of bank characteristics. All variables are defined in Appendix A.

	N	Mean	SD	Median	P25	P75
Maturity	4428	6.60	2.98	6.12	4.40	8.42
Asset Illiquidity	4428	0.16	0.10	0.17	0.10	0.24
%Uninsured	4428	0.41	0.14	0.40	0.31	0.50
NumUninsured	4428	5.20	1.43	5.08	4.25	5.99
ROE	4428	0.12	0.09	0.12	0.08	0.16
Capital Ratio	4428	0.10	0.05	0.09	0.07	0.11
Public	4428	0.08	0.27	0.00	0.00	0.00
Ln(Assets)	4428	12.87	1.45	12.70	11.90	13.61
C&I Loans	4428	0.13	0.10	0.11	0.06	0.16
RE Loans	4428	0.42	0.20	0.40	0.28	0.54
Wholesale Funding	4428	0.15	0.10	0.13	0.08	0.19
Abnormal SVI	4428	0.02	0.35	0.00	0.00	0.00

Table 2: SVB Disclosure. This table displays the frequency of SVB disclosure in our sample, as well as other characteristics of SVB disclosures. All variables are defined in Appendix A.

	N	Mean	SD	Median	P25	P75
SVB Disclosure	4428	0.09	0.29	0.00	0.00	0.00
Length	420	372.01	222.46	310.50	240.00	420.50
Tone	420	0.16	0.08	0.16	0.11	0.21
# Days Until SVB Disclosure	312	5.39	3.94	4.00	3.00	6.00
Within 2 Days	312	0.05	0.23	0.00	0.00	0.00
Within 3 Days	312	0.44	0.50	0.00	0.00	1.00
Within 4 Days	312	0.57	0.50	1.00	0.00	1.00
Within 5 Days	312	0.70	0.46	1.00	0.00	1.00
Discusses Unrealized Value	420	0.03	0.18	0.00	0.00	0.00
Discusses Duration	420	0.17	0.37	0.00	0.00	0.00
Discusses Interest Rate	420	0.11	0.32	0.00	0.00	0.00
Discusses Earnings	420	0.10	0.29	0.00	0.00	0.00
Discusses Capital Ratio	420	0.12	0.32	0.00	0.00	0.00
Public (Among Disclosing Banks)	420	0.15	0.35	0.00	0.00	0.00

Table 3: Repricing Maturity, Asset Illiquidity, and SVB Disclosure. This table reports results from examining the effect of repricing maturity and asset illiquidity on the likelihood of SVB disclosure. All variables are defined in Appendix A. All continuous variables are standardized for ease of interpretation. t-statistics are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	SVB Disclosure		
	(1)	**(2)**	**(3)**
Maturity	0.0204***		0.0221***
	(4.10)		(4.41)
Asset Illiquidity		0.00877*	0.0123**
		(1.68)	(2.33)
ROE	-0.00795*	-0.00850*	-0.00791*
	(-1.66)	(-1.77)	(-1.65)
Capital Ratio	0.00221	-0.000226	0.00253
	(0.47)	(-0.05)	(0.53)
Public	-0.0260	-0.0275	-0.0287
	(-1.27)	(-1.34)	(-1.41)
Ln(Assets)	0.263***	0.253***	0.221***
	(4.72)	(4.35)	(3.78)
$(Ln(Assets))^2$	-0.198***	-0.187***	-0.158***
	(-3.50)	(-3.17)	(-2.68)
C&I Loans	-0.000783	-0.00238	-0.00164
	(-0.15)	(-0.45)	(-0.31)
RE Loans	-0.00297	0.00978*	0.000485
	(-0.50)	(1.70)	(0.08)
Wholesale Funding	-0.00574	-0.00720	-0.00811*
	(-1.32)	(-1.61)	(-1.82)
N	4428	4428	4428
R^2	0.055	0.052	0.056

Table 4: Uninsured Deposits and SVB Disclosure. This table reports results from examining the effect of uninsured deposits on the likelihood of SVB disclosure. All variables are defined in Appendix A. All continuous variables are standardized for ease of interpretation. t-statistics are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	SVB Disclosure			
	(1)	**(2)**	**(3)**	**(4)**
%Uninsured	-0.00221			-0.00934*
	(-0.42)			(-1.68)
NumUninsured		0.0423***	0.0397***	0.0532***
		(2.81)	(2.58)	(3.32)
NumInsured			0.00725	
			(0.76)	
%Uninsured × NumUninsured				0.0115***
				(2.68)
ROE	-0.00844*	-0.00762	-0.00768	-0.00640
	(-1.76)	(-1.59)	(-1.60)	(-1.33)
Capital Ratio	-0.000197	0.00209	0.00266	0.00354
	(-0.04)	(0.44)	(0.55)	(0.74)
Public	-0.0256	-0.0253	-0.0252	-0.0260
	(-1.25)	(-1.24)	(-1.23)	(-1.28)
Ln(Assets)	0.286***	0.213***	0.210***	0.286***
	(5.06)	(3.50)	(3.44)	(4.31)
(Ln(Assets))²	-0.217***	-0.185***	-0.185***	-0.267***
	(-3.81)	(-3.21)	(-3.23)	(-4.16)
C&I Loans	-0.00159	-0.000849	-0.000684	-0.000628
	(-0.30)	(-0.16)	(-0.13)	(-0.12)
RE Loans	0.00599	0.00899	0.00801	0.00603
	(1.05)	(1.63)	(1.41)	(1.05)
Wholesale Funding	-0.00565	-0.00479	-0.00397	-0.00539
	(-1.29)	(-1.10)	(-0.89)	(-1.24)
N	4428	4428	4428	4428
R^2	0.051	0.053	0.053	0.055

Table 5: Cross-Sectional Tests. This table reports results from various cross-sectional tests. All variables are defined in Appendix A. All continuous variables are standardized for ease of interpretation. t-statistics are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	SVB Disclosure			
	(1)	**(2)**	**(3)**	**(4)**
Maturity × *NumUninsured*	0.0124***			
	(2.88)			
Asset Illiquidity × *NumUninsured*		0.0138***		
		(3.29)		
Maturity × *%Uninsured*			-0.000262	
			(-0.06)	
Asset Illiquidity × *%Uninsured*				0.00658*
				(1.75)
Maturity	0.0241***	0.0211***	0.0216***	0.0209***
	(4.73)	(4.19)	(4.19)	(4.13)
Asset Illiquidity	0.0104*	0.0118**	0.00993*	0.00873
	(1.93)	(2.20)	(1.85)	(1.62)
%Uninsured	-0.00493	-0.00707	-0.00577	-0.00503
	(-0.88)	(-1.26)	(-1.02)	(-0.90)
NumUninsured	0.0419***	0.0495***	0.0452***	0.0466***
	(2.59)	(3.05)	(2.78)	(2.88)
ROE	-0.00657	-0.00588	-0.00683	-0.00644
	(-1.37)	(-1.22)	(-1.42)	(-1.34)
Capital Ratio	0.00554	0.00357	0.00523	0.00484
	(1.15)	(0.73)	(1.07)	(1.00)
Public	-0.0283	-0.0367*	-0.0282	-0.0275
	(-1.39)	(-1.79)	(-1.38)	(-1.35)
Ln(Assets)	0.165***	0.185***	0.166***	0.175***
	(2.64)	(2.94)	(2.63)	(2.78)
(Ln(Assets))^2	-0.139**	-0.164***	-0.143**	-0.155**
	(-2.32)	(-2.73)	(-2.38)	(-2.56)
C&I Loans	0.000753	-0.00111	-0.000289	-0.000156
	(0.14)	(-0.21)	(-0.05)	(-0.03)
RE Loans	0.00108	0.000665	0.000406	-0.000114
	(0.17)	(0.10)	(0.06)	(-0.02)
Wholesale Funding	-0.00680	-0.00567	-0.00722	-0.00684
	(-1.52)	(-1.26)	(-1.61)	(-1.53)
N	4428	4428	4428	4428
R^2	0.059	0.060	0.058	0.058

Table 6: SVB Disclosure Content. This table examines the content of SVB disclosures. *Tone* is the sentiment of the SVB disclosure using lexicon-based sentiment analysis; when it is positive, it is closer to +1, while when it is negative, it is closer to -1. Specifically, we use the python library TextBlob to determine sentiment. TextBlob has a pre-defined lexicon of words with associated sentiment scores ranging from -1 (most negative) to +1 (most positive). All other variables are defined in Appendix A. All continuous explanatory variables are standardized for ease of interpretation. t-statistics are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Discusses Unrealized Value	***Discusses Duration***	***Discusses Interest Rate***	***Discusses Earnings***		***Discusses Capital Ratio***		***Tone***	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**
Maturity	-0.0253**	-0.0294***	-0.0448**						
	(-2.34)	(-3.39)	(-2.47)						
ROE				0.0223				-0.0121***	
				(1.51)				(-2.83)	
$\mathbb{I}_{ROE\ Above\ Median}$					0.0522*				-0.0278***
					(1.82)				(-3.63)
Capital Ratio						0.0306		-0.00839	
						(1.40)		(-1.45)	
$\mathbb{I}_{Capital\ Ratio\ Above\ Median}$							0.105***		-0.00851
							(3.35)		(-1.11)
N	420	420	420	420	420	420	420	420	420
R^2	0.013	0.027	0.014	0.005	0.008	0.005	0.026	0.019	0.031

Table 7: SVB Disclosure Timing. This table estimates parametric survival time models to examine the timing of SVB disclosure. We estimate the model using the generalized gamma distribution for the survival times, which allows for a flexible hazard function without imposing restrictive assumptions on its shape (Cleves, Gould, and Marchenko, 2016). All variables are defined in Appendix A. All continuous explanatory variables are standardized for ease of interpretation. t-statistics are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	# Days Until SVB Disclosure	
	(1)	**(2)**
Maturity	-0.0325	-0.0323
	(-0.86)	(-0.75)
Asset Illiquidity	0.00740	0.0563
	(0.16)	(0.95)
%Uninsured	-0.136***	-0.130***
	(-3.29)	(-3.01)
NumUninsured	0.0558	0.139
	(1.36)	(1.21)
ROE		0.0632
		(1.46)
Capital Ratio		-0.0462
		(-0.88)
Public		-0.313**
		(-2.56)
Ln(Assets)		-1.136*
		(-1.88)
$(Ln(Assets))^2$		1.044*
		(1.90)
C&I Loans		-0.0233
		(-0.56)
RE Loans		0.0174
		(0.29)
Wholesale Funding		-0.00704
		(-0.18)
N	312	312

Table 8: Information Search and SVB Disclosure. This table reports results from examining how information search affects the likelihood of SVB Disclosure. *High Abnormal SVI* is an indicator variable equal to one if *Abnormal SVI* is in the top decile. *Abnormal SVI* is abnormal google search volume intensity following Da, Engelberg, and Gao (2011). Specifically, it is the natural logarithm of one plus the average daily google search volume in the three-day window (3/10/23–3/12/23) minus the natural logarithm of one plus the median daily google search volume during the previous 8 weeks. All other variables are defined in Appendix A. All continuous variables are standardized for ease of interpretation. t-statistics are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	SVB Disclosure			
	(1)	**(2)**	**(3)**	**(4)**
High Abnormal SVI × NumUninsured	0.0366**			
	(2.00)			
High Abnormal SVI × %Uninsured		0.0297		
		(1.43)		
High Abnormal SVI × Maturity			0.0209	
			(0.92)	
High Abnormal SVI × Asset Illiquidity				0.0131
				(0.55)
High Abnormal SVI	-0.0202	-0.00509	0.00172	-0.00209
	(-0.83)	(-0.23)	(0.08)	(-0.09)
Maturity	0.0215***	0.0214***	0.0209***	0.0216***
	(4.28)	(4.26)	(4.10)	(4.30)
Asset Illiquidity	0.00980*	0.00959*	0.00986*	0.00945*
	(1.83)	(1.79)	(1.84)	(1.74)
%Uninsured	-0.00583	-0.00711	-0.00586	-0.00581
	(-1.04)	(-1.25)	(-1.05)	(-1.04)
NumUninsured	0.0434***	0.0451***	0.0449***	0.0449***
	(2.68)	(2.79)	(2.77)	(2.78)
ROE	-0.00694	-0.00683	-0.00675	-0.00691
	(-1.44)	(-1.42)	(-1.40)	(-1.44)
Capital Ratio	0.00528	0.00540	0.00537	0.00516
	(1.09)	(1.12)	(1.11)	(1.07)
Public	-0.0287	-0.0286	-0.0281	-0.0285
	(-1.41)	(-1.40)	(-1.38)	(-1.40)
Ln(Assets)	0.184***	0.172***	0.166***	0.167***
	(2.90)	(2.73)	(2.65)	(2.65)
(Ln(Assets))^2	-0.162***	-0.149**	-0.143**	-0.144**
	(-2.66)	(-2.48)	(-2.38)	(-2.39)
C&I Loans	-0.000420	-0.000749	-0.000171	-0.000328
	(-0.08)	(-0.14)	(-0.03)	(-0.06)
RE Loans	0.000353	-0.0000336	0.000389	0.000343
	(0.06)	(-0.01)	(0.06)	(0.05)
Wholesale Funding	-0.00732	-0.00721	-0.00709	-0.00717
	(-1.64)	(-1.61)	(-1.58)	(-1.60)
N	4428	4428	4428	4428
R^2	0.058	0.058	0.058	0.058