

COVID-19. Brexit. The war in Ukraine. The debt ceiling. Certain events grab our attention. Headlines and talking heads inform, investigate, and instill fear and uncertainty. Investors can't help but wonder what is happening. What does this mean for me? Should I DO something?

We believe understanding should precede action.

Thus, eight weeks into a crisis facing America's local and regional banks, we are taking a moment to establish a baseline understanding of why this situation is so important. It's not just about Silicon Valley Bank, Signature Bank, or First Republic. Local and Regional banks play an essential role in America's economy, circulating capital efficiently between depositors, business owners, homeowners, developers, service organizations, and others. In many regards these institutions serve as the lifeblood for much of our economic life.

Let's take a moment to understand the situation. Then, as empowered and better-educated investors, we can make more informed decisions.

WHAT IS THE BANKING INDUSTRY?

The banking industry consists of credit facilities, storage for cash, investments, and other financial transactions. Banks perform a wide variety of functions, including facilitating deposits and withdrawals, currency exchange, foreign exchange (Forex) trading (speculation on movement of exchange prices), and wealth management (investment management, financial advice). The most well-known role, however, is acting as a link between depositors and borrowers, using funds deposited by customers to provide credit facilities to other consumers who want to borrow.

WHAT ARE DIFFERENT TYPES OF BANKS?

Central Banks: Government institutions, like the Federal Reserve or the European Central Bank, whose primary role is to regulate their nation's money supply, by enacting changes in monetary policy (Interest rate increases/decreases).



Commercial Banks: take in deposits and issues loans. They range from small community and regional banks to large national banks. Commercial banks are distinguished by their asset size. National banks must be, "members of the Federal Reserve System, belong to the Federal Deposit Insurance Corporation, and be approved by the Office of the Comptroller of the Currency (OCC)." (Source: ffiec.gov)

Community Banks	Regional Banks	National Banks
Assets: < \$10 billion	Assets: \$10b - \$100b	Assets: >\$100b
# banks: 4,750	# banks: 102	# banks: 31
Ex: Northrim, Carver, Fremont	Ex: Associated, Flagstar, Zions	Ex: Chase, Bank of America, Barclays

Source: fdic.gov Year end 2019

Investment Banks: Generally, work with companies to help them issue stock (IPO's) or debt, or to facilitate mergers and acquisitions between companies. Can also advise government or quasi-government entities. Larger banks like J.P Morgan, Morgan Stanley, and Goldman Sachs have separate divisions for both Commercial and Investment banking.

WHAT ARE PRIMARY BANKING FUNDAMENTALS?

In the US, banks are regulated by the Federal Reserve. Banks have historically been held to a rule of thumb of retaining at least 10% of each deposit on hand, while being able to lend out the other 90% as loans. This is known as the Reserve Requirement. The reserve requirement is determined by the Federal Reserve. The reserve requirement is one of the main tools of monetary policy that the Fed utilizes to manage inflation, along with the Fed Funds Rate (FFR) and Open Market Operations (OMO).

When the Fed reduces the reserve requirement for member banks, this is known as an expansionary monetary policy, which leads to an increase in the amount of money in the economy. In theory, more money in the system should stimulate spending to facilitate growth and increase inflation. For example, as a response to the COVID-19 pandemic, reserve requirements were set to 0%, effective March 26, 2020. Interestingly, they are still set there today.



On the contrary, when it increases the reserve requirement, the Fed is utilizing a contractionary monetary policy which reduces the amount of money banks can loan out, putting a strain on the economy (tightening), reducing spending, and reining in inflation. Increasing the reserve requirement today to reduce inflation could put too much stress on banks that already are under tremendous pressure, as we will discuss.

HOW CAN THE BANKING INDUSTRY IMPACT ECONOMIC ACTIVITY?

The banking sector is crucial to the modern economy. As the primary supplier of credit, banks provide money to consumers to purchase major durable goods such as cars and homes (auto loans and mortgage loans) that they would not be able to afford by paying out of pocket all at once. Banks also provide business loans which are used to fund expansion of operations, upgrades on equipment to cut operating costs, and hiring of personnel. Banks also serve as stores of deposits and issue credit cards, debit cards, and checking accounts to help facilitate all kinds of everyday transactions.

Due to its national footprint, the banking sector is also a major US employer. At the end of 2022, banking related industries alone employed more than 2 million people in the United States (source BLS.gov).

WHAT ARE THE PRIMARY CAUSES OF BANK FAILURES?

At its core, the banking system is underpinned by trust and confidence. Trust and Confidence, Illiquidity, and Insolvency are inextricably linked.

Liquidity/Illiquidity: Liquidity is the ability to readily convert an asset into cash. An illiquid asset is one that cannot readily be converted into cash without a possible fire-sale. The business model for banking is inherently fragile due to the illiquidity of bank assets (e.g., loans and financial assets) relative to liquid liabilities (e.g., demand deposits).

Banks only keep enough cash on hand to cover a relatively small proportion of demand deposits which can be withdrawn at any time. If depositor withdrawals exceed the available cash on hand, the bank will need to liquidate its assets possibly at steep discounts to their intrinsic value to meet depositor withdrawals. If people lose trust and confidence in a bank, depositors will withdrawal their demand deposits which can lead to a "run on the bank" that becomes self-reinforcing and possibly systemic absent government assistance.



Insolvency: While illiquidity is the inability to meet short-term obligations, insolvency is the inability to meet longer-term obligations. A bank becomes insolvent when the value of its assets falls below the value of its liabilities. Real or perceived bank solvency problems can lead to liquidity problems, which, in turn, can cause depositors to withdraw funds even more aggressively given their lack of trust and confidence in the bank. As this cycle intensifies, it can ignite a "bank run."

When we reflect on the most common causes of bank insolvency over the last twenty years, two examples rise to the fore:

- 1. The bank holds nonperforming loans that cannot be paid back at their full-face value. This situation was a common cause of bank failures in the Great Financial Crisis of 2007-2009.
- 2. The bank holds bonds that have materially dropped in value because of a rising interest rate environment. Today's banking challenges derive at least in part from this situation. With many bank bond portfolios down over 10% in 2022, the asset side of the balance sheet took a hit based solely on the Fed raising rates.

WHAT ARE CORE RISKS THAT BANKS MUST MANAGE?

Banks are essentially balancing and managing profitability against solvency and liquidity considerations. The two core risks that banks must manage are Credit Risk and Interest Rate/Market Risk:

Credit Risk: Credit risk is a lender's potential for financial loss to a creditor, or, said differently, the risk that the creditor will default on a loan. The greater the perceived risk, the higher the interest rate on the loan, whereas the lesser the perceived risk, the lower the interest rate on the loan. However, charging a higher interest rate for greater perceived risk can lead to an increase in the probability of default, resulting in a positive feedback loop. A common framework utilized to predict and mitigate the likelihood of default are the "5 C's of Credit" which are: 1. Capacity; 2. Capital; 3. Conditions; 4. Character; and 5. Collateral.

Interest Rate Risk: Interest rate/market risk is the risk associated with the value of assets, particularly fixed-income assets with longer maturities/duration, due to fluctuations in interest rates and the prices of fixed-income assets. Given that prices of fixed-income assets are inversely related to interest rates, environments such as we faced in 2022 can prove devastating for otherwise high-quality bond portfolios.



To mitigate interest rate risk, banks can use diversification or hedging strategies that reduce a portfolio's effective duration or negate the impact of rate changes. In addition, banks can strive to match the maturity and re-pricing terms of its assets and liabilities which is referred to as asset-liability management, though that is difficult in a rapidly changing interest rate environment. Ultimately, we would expect that the Fed will be considering additional regulations intended to mitigate interest rate risk going forward.

BANKING SYSTEM CONDITIONS PRE-CRISIS

To prop up the economy during the 2020 COVID-19 lockdown, the Fed injected significant liquidity into the system and bank deposits spiked. Silicon Valley Bank (SVB) was one of the largest beneficiaries as its tech-focused customer base was bulging with money from a robust Venture Capital investment cycle. The Fed lowered rates and banks benefited from this zero-interest rate policy (ZIRP) as depositors earned next to nothing on their cash balances.

As inflation spiked in late 2021, the Fed began its aggressive rate hiking cycle in March of 2022. Depositors began withdrawing funds from banks in late 2022 in search of yield. As rates spiked in 2022 and early 2023, banks reported significant unrealized losses on their securities portfolios as many had invested excess deposits in longer duration fixed income when rates were at all-time lows. The recent stress in regional banks has stemmed from this asset/liability mismatch. Larger banks are under less stress given increased regulation and oversight since the Great Financial Crisis (GFC).

WHAT HAPPENED TO SILICON VALLEY BANK?

Silicon Valley Bank ("SVB") was in a category of its own. SVB maintained a high level of loans as a percentage of deposits. SVB also had a very low reliance on stickier retail deposits as a share of total deposits, instead carving out a niche dependent on corporate/Venture Capital customers who not surprisingly proved more mercurial. According to SVB's 12/31/22 10K filing, out of SVB's \$173 billion of customer deposits at the end of 2022, \$152 billion were reportedly uninsured, and only \$4.8 Billion were fully insured. This disproportionately large portion of uninsured deposits made SVB particularly vulnerable to deposit withdrawal risk.



The portion of SVB's deposits that were not turned into loans were used to purchase public fixed income securities, namely Treasury and mortgage-backed securities. This portfolio of investment bonds was vulnerable to rising interest rates. The combination of SVB's actions and customer composition set itself up for large potential capital shortfalls in the case of rising interest rates, deposit outflows, or forced asset sales, all of which came to fruition.

SVB seemingly mis-managed multiple risks including pursuing irresponsible deposit growth, maintaining an undiversified customer base, and investing in long duration fixed income instruments without hedging the associated interest rate risk. SVB's size (assets < \$250 billion) allowed it to avoid regulatory 'stress tests' which may have brought these issues to light.

WHAT IMPACT DID THE SVB CRISIS HAVE ON FINANCIAL MARKETS?

Public Market Investments: As markets learned about SVB's precarious position, the firm's publicly listed stock and debt both suffered large price declines as investors attempted to quantify the size of SVB's potential trouble. An immediate secondary effect was for investors to question if other banks were in similar positions. Broad banking industry stocks and debt, particularly among smaller/regional banks, experienced rapid and significant price declines beginning in March.

Regional banking stocks continue to trade at these depressed levels as investors begin to sift through the first round of earnings results post-SVB turmoil for clues about deposit levels, loan growth and margins. These valuations appropriately reflect the uncertainty surrounding the forward prospects of regional banks. Unfortunately, the lower stock prices also put additional pressure on the publicly traded banks at an already challenging time.

Venture Capital: SVB had been considered "too big to fail" in the venture capital ecosystem as it was the leading banking partner for venture capital firms over the last 40 years, providing banking services for roughly 50% of US venture-backed startups and 80% of tech-startups, while accounting for only 0.9% of total assets in the US banking system. SVB also was the largest issuer of venture debt in the startup ecosystem. Venture debt allows startups to avoid giving up more equity and is a cheaper source of financing to grow operations. The net result from the fallout of SVB is a higher cost of capital and bigger cash crunch for startups, which could lead to more distressed companies in the venture capital ecosystem, at least until they are able to identify alternative sources of capital.



Private Equity: Lending practices have become more conservative for bank-led Leveraged Buy Out (LBO) loans since the start of the Fed's tightening cycle. We also anticipate further credit tightening from regional and smaller banks as they focus on liquidity, solvency, and stemming the outflow of deposits. Larger firms are reaching towards deals that require less leverage, buying assets that can be financed through majority equity transactions, and avoiding the loan supply altogether.

Private Credit: We expect banks to shore up their balance sheets, regulators to tighten oversight of local and regional banks, and depositors to move more balances to larger banks or money market funds. As such, small and mid-sized businesses face greater headwinds in accessing bank credit. As a result, it is likely that the collapse of SVB will lead to an acceleration of credit away from banks and into the private markets, especially for small and middle market businesses and possibly for commercial real estate. While this pivot helps keep capital flowing, it also represents the benefits and risks of unregulated private capital, commonly referred to as "shadow banking."

Commercial Real Estate: According to Preqin, commercial real estate (CRE) loans are approaching \$2.9 trillion, many of which sit on the balance sheets of regional banks. Midsize and regional banks provide the bulk (roughly 70%) of real estate loans to businesses. They package the loans into financial products and sell them to investors to raise more money for additional loans. A large percentage of commercial real estate loans will require refinancing over the next three years with 25% of office loans refinanced in 2023.

Due to the shift towards remote work during Covid, the hardest hit commercial real estate sector has been office, with office vacancy rates seven times higher than they were pre-pandemic. We are concerned that higher cap rates, declines in net operating income (NOI), and increase in borrowing costs will lead to lower valuations and require additional injections of capital or lead to default. Against this backdrop, it will be more difficult for the office sector to refinance if lenders do not extend short-term forbearance or loan modifications. As banks shore up their balance sheets and become more risk averse lenders, there is an opportunity for private credit to step into this void, mitigating a potential credit crunch.

MOVING FORWARD

This banking turmoil is clear evidence that monetary policy changes are beginning to directly impact the economy, even if in ways that were unanticipated by the Fed or the markets. Short-term, pressures in the banking system should support the Fed's efforts



to slow economic activity to bring inflation back to target. Perhaps this additional brake on the economy enables the Fed to reach the end of this tightening cycle more quickly. And perhaps there are other unanticipated weaknesses that will emerge.

In the meantime, we hope that today's challenges only serve to strengthen local and regional banking. These thousands of institutions not only employ hundreds of thousands of our friends and neighbors, they facilitate the flow of capital that invigorates and stimulates our local economies. We hope that wise minds at the Fed and in Congress will temper whatever tendencies there may be to force still further consolidation within the banking industry. That banks will continue to invest in their local communities and vice versa. And that investors will be slow to bet against such an important component of our dynamic economy.

Hopefully, we all will take the time to understand the nuances of the situation. Then, as an empowered and better educated society, we can make more informed decisions.