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Causes and consequences of the 2023 banking crisis

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Abstract

This paper presents a discussion about the causes and consequences of the 2023 banking crisis in the United States. Using discourse analysis, the paper shows that the 2023 banking crisis was the worst crisis in the US and Europe since the 2007-2008 global financial crisis. This banking crisis was caused by aggressive interest rate hikes by the US Federal Reserve. The increase in interest rates led to huge losses on the portfolio of government bonds held by US banks. The losses led to fears of bank collapse and triggered unprecedented deposit outflows which led to funding and liquidity problems for some banks and the eventual collapse of four banks – Silicon Valley Bank, Signature Bank, First Republic Bank and Credit Suisse. This crisis showed that the increase in interest rates can unmask hidden vulnerabilities in the banking system.

Keywords: Banking crisis, interest rates, Silicon Valley Bank, regional banks, financial crisis, United States, Europe.

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1. Introduction

This article explores the causes and consequences of the 2023 banking crisis which began in the United States. Existing studies have identified several causes of banking crises such as poor risk management, ineffective regulation and supervision, weak corporate governance, high nonperforming loans, low capital adequacy ratio, and monetary policy (see, for example, Christiano et al, 2004; Taylor, 2009; De Grauwe, 2010; Chava and Purnanandam, 2011; Ozili, 2018).

Monetary policy is often used to control inflation through changes in interest rate and money supply. Economists argue that monetary policy has been an indirect cause of past financial crises. For instance, Christiano et al (2004) and Taylor (2009) show that the low-interest rate regime in the U.S. beginning from 2004 led to a boom in subprime mortgage lending and the securitization boom which imploded in 2007 and 2008 (Taylor, 2009). This event led to the conclusion that the Federal Reserve's low interest rate regime was a remote (or indirect) cause of the global financial crisis, but it was not a direct cause of the global financial crisis.

Recent events have also led economists to blame monetary policy as a cause of the 2023 banking crisis in the United States. In early 2023, central banks around the world began raising interest rates. The hike in interest rate led to a banking crisis in the US which led to the failure of some regional banks in the US and the collapse of a systemic bank in Europe.¹ The collapse of Silicon Valley Bank, Signature Bank, Credit Suisse, and First Republic Bank led to a wave of financial instability issues¹ and raised concerns that the crisis could spill-over to other countries. The banking crisis prompted regulators to issue unconventional deposit guarantees, such as granting full deposit insurance to all depositors to quell the banking crisis in the US and prevent it from spreading to Europe. Although this approach worked in the short-term, the literature on deposit guarantee schemes shows that granting full deposit insurance guarantee is costly, politically difficult to implement, it serves the interest of wealthy people, and it only works in an environment of high trust in government (see Yan, Skully, Avram and Vu, 2014; and Cerrone, 2018).

¹ The banking crisis of 2023 was very different from the 2008 global financial crisis. The banking sector in the US and Europe was more capitalized in 2023 than it was during the 2008 global financial crisis, and banks were more tightly regulated in 2023 than they were in 2008.

Although the crisis could be linked to raising interest rates in the US, the existing literature has not identified rising interest rate to be a direct cause of banking crisis in the US. There is a need to understand the role of rising interest rate in causing banking crises, with particular focus on how the rise in the central bank interest rate caused the 2023 banking crisis in the U.S. The insights gained from such analysis can help central banks to consider the ramifications of interest rate hikes in the financial sector. This study offers a unique perspective on how government policy can trigger a banking crisis.

The discussion in this paper contributes to the banking crisis literature (see for example, Laeven and Valencia, 2020; Iacovone et al, 2019; Nguyen, 2022). The present study adds to the literature by examining the role of monetary policy in causing the US banking crisis. It show that rising interest rate is a potential cause of banking crisis in the US. The study also contributes to the monetary policy literature that analyse the consequences of monetary policy decisions (see, for example, Wang et al, 2022; Amberg et al, 2022), It shows that an unexpected rise in interest rates can have unintended consequences on the banking sector. Finally, the study stirs up policy debates about deposit insurance and whether full deposit insurance can bring an end to a banking crisis.

The rest of the paper is structured in the following way. Section 2 presents the review of literature. Section 3 identifies the causes of the 2023 banking crisis. Section 4 presents some real-world bank failures that occurred during the 2023 banking crisis. Section 5 identifies some effects of the 2023 banking crisis. Section 6 discusses the role of full deposit insurance in preventing a future bank run. Section 7 presents the conclusion of the paper.

2. Review of literature

In theory, there are three types of financial crisis, namely, (i) banking crises and panics, (ii) credit frictions and market freezes, and (iii) currency crises (Goldstein and Razin, 2015). Financial crises are caused by frictions that produce extreme disruption of the normal functioning of financial and monetary systems (Goldstein and Razin, 2013). It occurs when financial and monetary systems are not able to efficiently channel financial resources to the real sector (Rajan and Zingales 1998). In the case of banks, Diamond and Dybvig (1983) show that banks can finance long-term assets with short-term deposits, and it provides banks with cheap liquidity, but frictions can make banks

unable to perform their function efficiently and such frictions can expose the bank to the risk of a bank run if many creditors and depositors decide to withdraw their money too early and at the same time. When a large number of depositors withdraw their money from a bank, other depositors will have a stronger incentive to withdraw, and it can lead to the failure of the bank (Goldstein and Razin, 2015). Another school of thought championed by Demirgüç-Kunt and Detragiache (1997) argue that banking crisis occurs in a weak macroeconomic environment characterized by slow GDP growth, high inflation, and high interest rates that give rise to banking sector problems and a crisis. Another school of thought championed by Wolfson (2002) argue that, during economic expansion, optimism increases and the prices of financial assets and speculation increases. Increase in interest rates would lead to changes in attitudes about risk and debt level, and the increase in risk and rising debt level which would make the financial system become increasingly fragile.

Several banking crises in the past have been caused by government policy such as the 2007/2008 global financial crisis. Mohan (2009) argued that the mortgage crisis in the United States started with excessively loose monetary policy in the US during 2002 to 2004. Low interest rates encouraged the search for higher yield and consequently created large global imbalances. The low interest rates combined with other factors such as lax lending standards, excessive leverage and the underpricing of risk led to a mortgage crisis that quickly spread to global financial markets thereby causing the 2008 financial crisis. Born (2011) pointed out that the 2008 financial crisis was the tragic result of thirty years of deregulation in the financial sector. He explained that government policy led to deregulation in the financial sector and led to a shift to self-regulation that permitted US investment banks to increase leverage. This created vulnerabilities in the financial system. The deregulation also led to failures in financial regulation and supervision along with failures of corporate governance and risk management at major financial firms, and these failures caused the financial crisis in 2007 and 2008. Norberg (2012) supports Born (2011)'s argument, and argued that the 2008 global financial crisis started with government policy that promised home ownership for all Americans. The policy led to a frenzy for home ownership in America. It led to an era of easy money for housing, subprime lending and the rise in mortgage-backed securities which contributed to causing the financial crisis. Edey (2009) argued that the global financial crisis would not have occurred if the government had not introduced policies aimed at encouraging home-ownership and reduced regulation in the financial sector prior to 2008. Edey (2009) further argued that government policy led to regulatory failures, and the pace and

complexity of financial innovation was not monitored due to the broad policy of financial sector deregulation at the time. Taylor (2018) pointed out that specific government actions and interventions were responsible for the financial crisis.

There is no doubt that government policy has played a role in causing past financial (banking) crises. But government policy alone is not to blame. Weak corporate governance, excessive risk-taking, overleveraging, reduced diversification, bogus credit ratings and other factors have also played a significant role in causing past financial crises. For instance, Coffee Jr (2009) opined that the 2008 financial crisis was the direct product of a supply-driven bubble in which asset-backed securitization failed. The failure was attributed to excessive reliance on credit rating agencies that gave AAA ratings to clients due to client pressure as competition increased in its market; and there was a shift toward more self-regulation that permitted US investment banks to increase leverage and reduce diversification under the pressure of competition. Helleiner (2011) argued that international capital flows, market and regulatory failures as well as cheap credit during the pre-crisis period were major causes of the 2008 global financial crisis. Yeoh (2010) argued that sub-prime mortgages in the United States led to the 2008 global financial crisis, and the crisis was a combined result of adverse macro-economic conditions, bad corporate governance, loose regulatory oversight and flawed governance practices in both the public and private sector. Jickling (2009) argued that the cause of the global financial crisis goes back much further to the time when credit standards in U.S. mortgage lending were relaxed in the early 2000s, and that rising rates of delinquency and foreclosures delivered a sharp shock to a range of U.S. financial institutions.

Acharya and Richardson (2009) showed that the global financial crisis occurred because banks had evaded regulatory capital requirements which were aimed at keeping banks safe. Banks evaded regulatory capital requirements by temporarily placing their assets — such as securitized mortgages — in off-balance-sheet entities, so that they do not have to hold significant capital buffers against them. Also, the Basel capital regulations allowed banks to reduce the amount of capital they held against assets that remained on their balance sheets especially if those assets took the form of AAA-rated tranches of securitized mortgages. Banks repackaged mortgages into mortgage-backed securities, whether held on or off their balance sheets. This enabled banks to reduce the amount of capital required against their loans, and it increased their ability to make loans many-fold. Carmassi, Gros and Micossi (2009) argued that the global financial crisis of

2007–2008 was caused by lax monetary policy and weak regulation which allowed and encouraged excessive leverage and maturity transformation by banks. Innovation also contributed to reckless credit expansion and investments. Blundell-Wignall, Atkinson and Lee (2009) argued that one fundamental cause of the crisis was a change in the business model of banking, and the mixing credit with equity culture. They argued that when the new model of banking was combined with complex interactions from incentives emanating from macro policies, changes in regulations, taxation, and corporate governance, the current crisis became the inevitable result.

Barrell and Davis (2008) focused on the evolution of the 2008 financial crisis. They showed that low real interest rates stimulated an asset price bubble. The bubble gave rise to financial innovation and increases in lending. The new financial products were not stress tested, and the new financial products failed during the crisis. Lin and Treichel (2012) showed that the housing bubble occurred due to the Federal Reserve's low interest rate policy in the aftermath of the burst of the "dot-com" bubble in 2001. This was followed by lack of appropriate financial regulation and housing policies aimed at expanding the mortgage market to low-income borrowers. Friedman and Friedman (2009) argued that the crisis was caused by unethical factors. They argued that the crisis would not have occurred if the parties involved had been socially responsible and not motivated by greed, and that conflicts of interest and the way CEOs were compensated were at the heart of the financial crisis. Liang (2012) argued that global imbalances and global financial instability are tightly connected through financial globalization within the current monetary and financial system. They argued that financial globalization leads to increasing global financial instability, and the failure of the United States to provide global liquidity and manage financial risks ultimately led to the 2008 global financial crisis. The next section discusses the cause of the 2023 banking crisis.

3. Cause of the 2023 banking crisis

3.1. COVID-19 and the Russia-Ukraine War

Any discussion about the 2023 banking crisis in the US must begin with a discussion about the COVID-19 pandemic and the Russia-Ukraine war. These two events contributed to the 2023 banking crisis in specific ways. The COVID-19 pandemic contributed to the banking crisis through the low interest rate and the significant fiscal stimulus that were introduced to stimulate aggregate demand to exit the COVID-induced recession in 2020 and 2021 (Ozili, 2022a). The low interest rate environment and the COVID-era fiscal stimulus led to rising inflation in many countries, including the US, which would require increase in interest rates to tame the rising inflation. Also, the Russia-Ukraine war, which began in March 2022, caused supply chain disruptions and led to fuel/energy and food shortages which led to a further rise in inflation (Ozili, 2022b). Advanced economies, including the United States and the euro area, had inflation rates exceeding 5 percent even before the Russia-Ukraine war, and the war made the inflation rate worse as the UK and US witnessed record inflation rates.

3.2. Rising inflation

The global economy witnessed rising inflation between 2020 to mid-2023 due to the COVID-19 pandemic, the Russian invasion of Ukraine, the global energy crisis, the COVID lockdowns in China and pandemic-era supply bottlenecks. These factors led to rising inflation in advanced economies and emerging economies. Advanced economies, such as the UK and US, witnessed historical high inflation. For instance, the annual inflation rate in the US reached 9.1 percent in June of 2022, making it the highest inflation rate in the US in 40years. The inflation rate in the UK reached a double-digit rate of 10.1 percent in July 2022 and the inflation rate remained above 10 percent between October 2022 to March 2023. Energy and food prices were rising in many countries due to supply chain disruption caused by the Russia-Ukraine War. The high level of inflation witnessed in many countries led to a cost-of-living crisis and raised fears of a global recession.

3.3. The rise in interest rate

Due to rising inflation, central banks had to make a choice between stimulating economic growth for post-COVID recovery which would leave inflation unabated or increase interest rate to slow economic growth and inflation (Sieroń, 2023). In 2022 and 2023, most central banks around the world chose the latter, preferring to slow economic growth and inflation. Central banks began to raise interest rate to control rising inflation. The increase in interest rate increased borrowing costs for many kinds of loans. It constrained access to cash, restricted household's ability to spend, reduced demand for goods and services, slowed economic growth and reduced pressure on prices. While raising interest rate is the classic approach used by central banks to combat inflation (Calvo and Végh, 1995), the expectation of interest rate hikes led to fears that rising interest rate will reduce banks' ability to service their debt and could plunge banks into financial difficulties especially those holding long-term bonds. Before the crisis, the US Federal Reserve had stated that the increase in interest rate would bring economic pain through reduction in lending, but the US Federal Reserve did not anticipate that the increase in interest rate would lead to a banking crisis in the US. The next section provides a detailed explanation of how banks collapsed during the 2023 banking crisis.

4. Bank collapse during the Banking Crisis

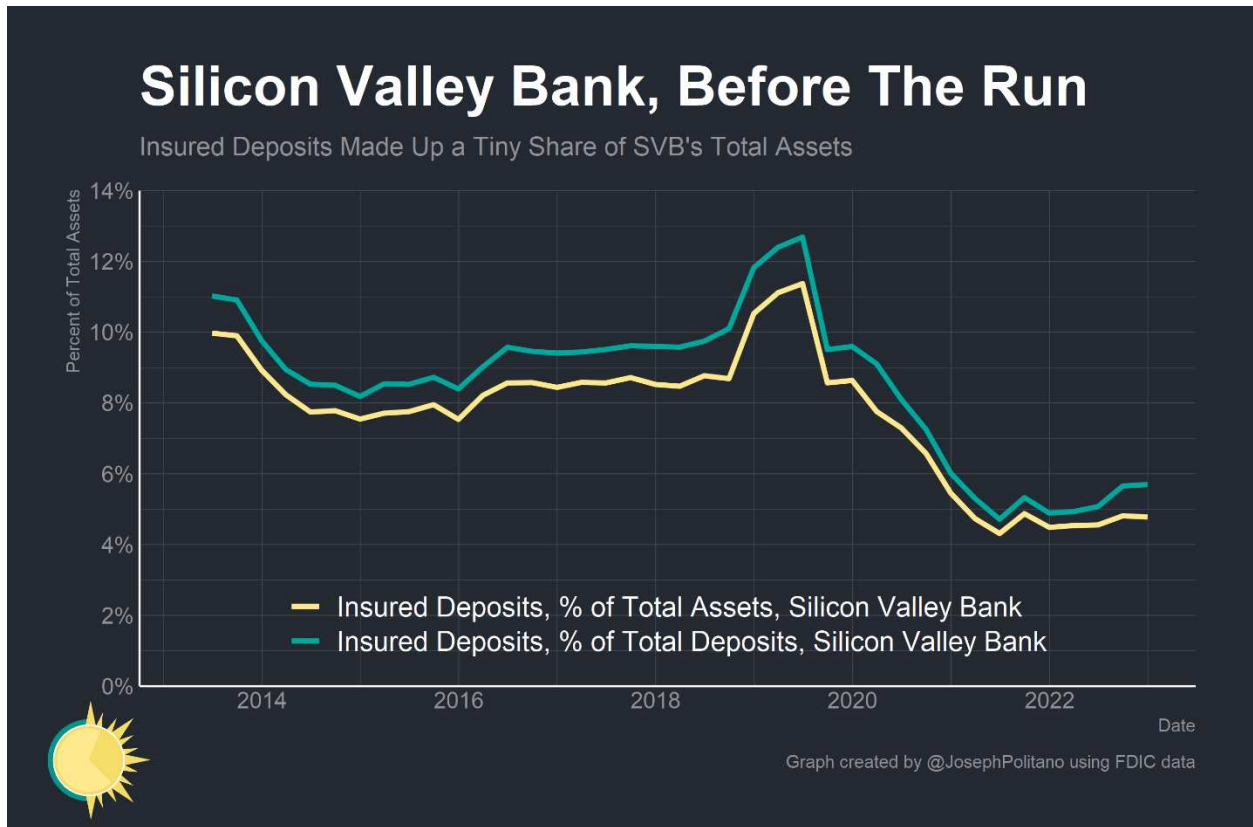
The banking crisis of 2023 in the United States began with rising interest rates which unmasked hidden vulnerabilities linked to (i) poor investment strategy of some banks, (ii) failure to manage interest rate risk, and (iii) investor pessimism during the banking crisis. Below are three banks that failed during the 2023 banking crisis.

4.1. The Collapse of Silicon Valley Bank

Some banks were affected by the rising interest rates in the US. The first bank to fail was Silicon Valley Bank. Silicon Valley Bank was a regional bank that served U.S. venture capitalists and technology startups. It had a large share of uninsured deposits (see figure 1). The collapse of Silicon Valley Bank (SVB) was caused primarily by two main factors: (i) SVB's poor investment strategy during the tech boom of 2020 to 2021, and (ii) the US Federal Reserve's decision to raise

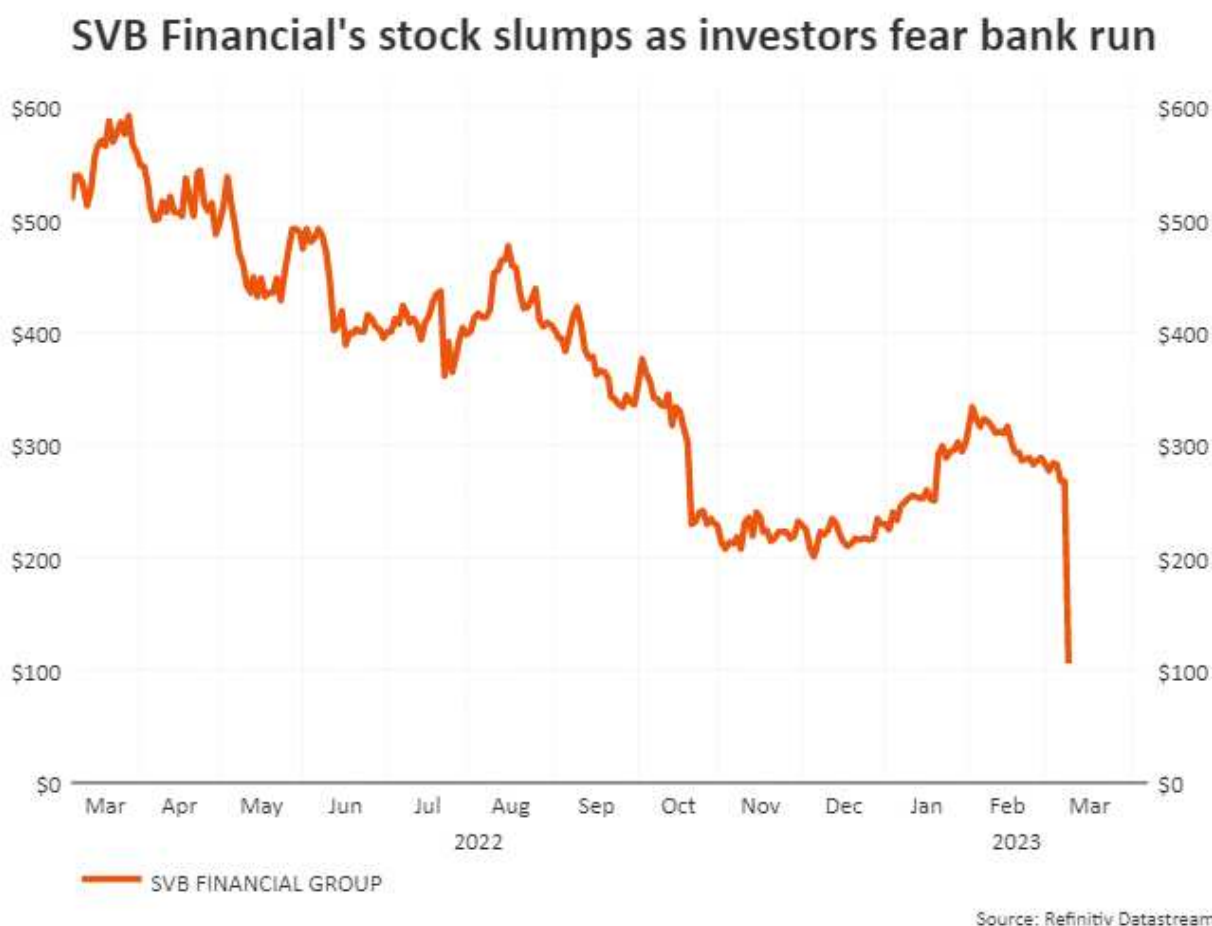
interest rates. During the tech boom of 2020 to 2021, SVB took the money it received from deposits and invested the deposits into long term treasury bonds when interest rates were low during the tech boom of 2020 to 2021. By doing so, SVB committed a classic error in banking which is borrowing money in the short term and investing in long-term bonds. The investment strategy of SVB is profitable if interest rates remained low but would pose a significant risk to the bank if interest rate begin to rise. When the US Federal Reserve began to raise interest rates to control inflation, the market value of the treasury bonds held by SVB fell below the price which SVB paid to purchase the bonds. As a result, SVB was forced to sell its bonds at big losses. SVB made a loss on nearly all its securities that were available-for-sale, most of which were US treasury securities. The loss incurred by the bank prompted concerns about the bank's financial health. Within 48 hours, depositors who received early information about SVB's distress had made deposit withdrawal requests and had quickly withdrawn enough funds from the bank. Subsequent deposit withdrawal requests led to a severe cash shortage and a liquidity crisis in the bank. The bank's stock price crashed significantly (see figure 2), and affected the bank's ability to raise additional equity capital. As a result, Silicon Valley Bank collapsed on March 10, 2023. The bank's collapse prompted the U.S. regulator – the FDIC – to step in with emergency measures including seizing another bank – Signature Bank – in a bid to ease fears that depositors might pull out their money from other banks.

Figure 1. Insured deposit of SVB before the crisis²



² Source: Joseph Politano using FDIC data

Figure 2. Stock price crash of SVB³



4.2. The Collapse of Signature Bank

Signature Bank had large exposure to the crypto sector and an abnormally large share of uninsured deposits reaching US\$79.5 billion as of December 2022. Signature Bank's collapse was not due to bad investment strategy or the US Fed's rate hike. Rather, Signature Bank's collapse was a case of forced-death-by-association. In other words, Signature Bank was a victim of the panic around Silicon Valley Bank (SVB). Immediately after the collapse of SVB, depositors had already withdrawn more than \$10 billion in deposits from Signature Bank. The FDIC immediately seized and shut down Signature Bank on March 12, 2023, because the FDIC was deeply concerned about the contagion effect of SVB's collapse on Signature Bank which could trigger a system-wide bank run and contagion of systemic proportions. There were concerns that the large deposits withdrawal

³ Source: Refinitiv Datastream

from SVB could lead to large deposits withdrawal from Signature Bank and lead to subsequent deposits withdrawal from other banks, thereby triggering a systemic collapse of the entire US banking system. The reason for the shutdown of Signature Bank by the FDIC was to contain the panic in the banking system and prevent it from spreading to other banks. The collapse of Silicon Valley Bank and Signature Bank have called into question the limits of deposit insurance and which banks are truly too-big-to-fail since Silicon Valley Bank and Signature Bank were not designated as too-big-to-fail banking institutions, but their failure nearly brought down the US banking system.

4.3. The failure of Credit Suisse

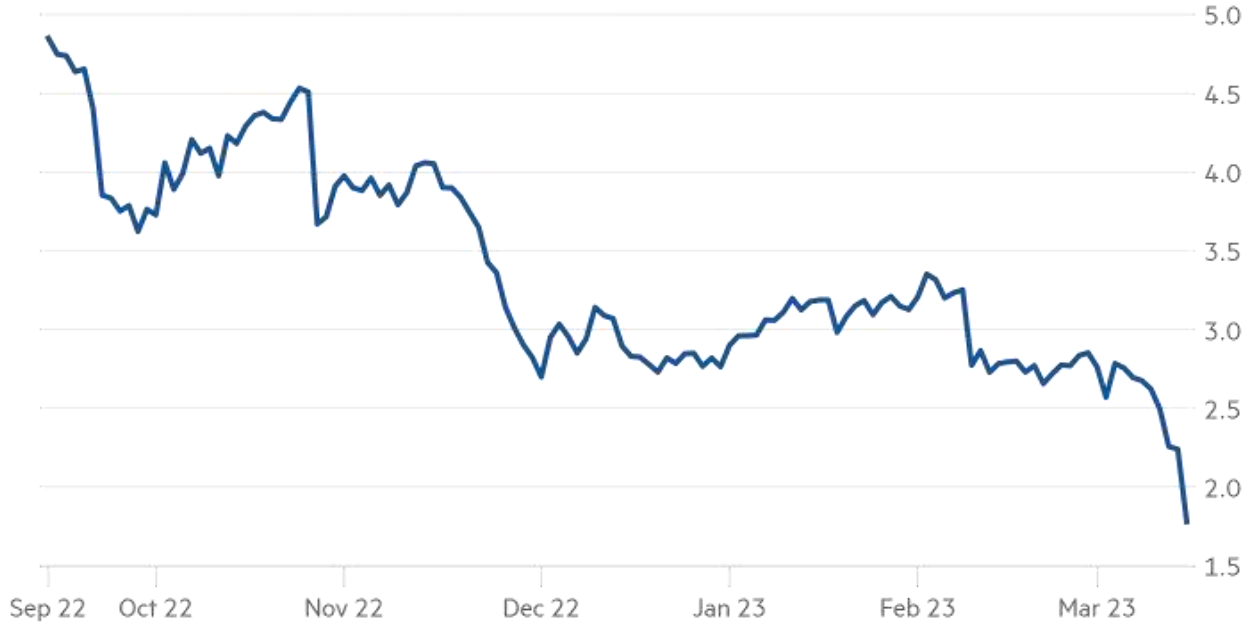
Credit Suisse was designated a “global systemically important bank” by the Financial Stability Board. After the 2008 financial crisis, Credit Suisse faced unending scandals, litigations, fines and financial losses linked to the 2007-2008 sub-prime mortgage crisis and other events.ⁱⁱ In fact, Credit Suisse was often called the ‘problem child’ of the global banking system. As a result, the bank suffered reputational damage for many years after the 2008 financial crisis. But, somehow, Credit Suisse was able to survive the scandals, litigations, fines and financial losses. However, in 2023, the failure of Silicon Valley Bank and Signature Bank, caused panic among foreign investors around the world. Foreign investors were on high alert for signs of contagion in the US banking system. This led to a selloff in the shares of large international banks around the world, including the shares of Credit Suisse, as investors scrambled for safety. Days after the failure of SVB and Signature Bank, Credit Suisse needed capital injection from its largest shareholder – the Saudi National Bank. But the largest shareholder refused to inject any more capital into Credit Suisse due to regulatory rules that prevented banks from holding more than 10% ownership of other banks. As a result of this, Credit Suisse could not raise additional equity capital quickly. Credit Suisse’s inability to raise fresh capital combined with investors’ apathy for new investment due to the recent failure of two US banks, plunged Credit Suisse into significant distress. The share price of Credit Suisse plunged rapidly and led to fears that Credit Suisse would collapse (see figure 3). Depositors immediately withdrew US\$35bn from Credit Suisse within three days.ⁱⁱⁱ This led the bank to reach out to the Swiss Central Bank for support to survive. The Swiss Central Bank ordered Credit Suisse to be sold to UBS, its fierce rival, or face oblivion. Credit Suisse was acquired by UBS in a deal brokered with the help of the Swiss Central Bank. The failure of Credit

Suisse during the period of rising interest rates in the US and around the world shows that rising interest rates can quickly unmask the hidden vulnerabilities in financial institutions and in the financial system.

⁴Figure 3. Stock price crash of Credit Suisse

Credit Suisse shares slide

Share price (SFr)



Source: Refinitiv
© FT

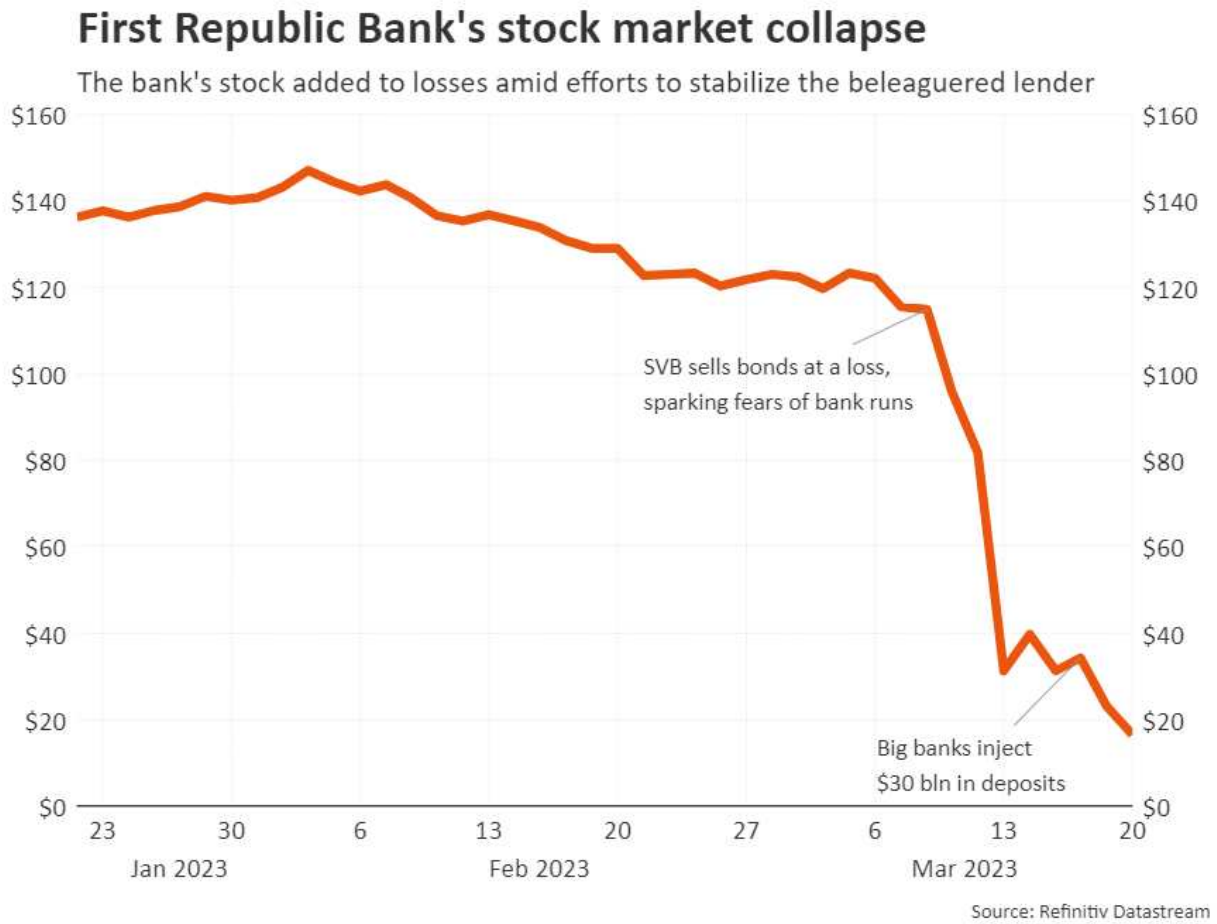
⁴ Source: Refinitiv Datastream

4.4. The failure of First Republic Bank

First Republic Bank was affected by the Federal Reserve's hike in interest rates in early 2023. First Republic Bank was a regional bank that focused on high-net-worth clients. The bank began to struggle after the Federal Reserve raised interest rates. The bank's troubles were compounded by the collapse of Silicon Valley Bank and Signature Bank in March of 2023. After the collapse of the two banks, First Republic bank witnessed a deposit injection of \$30 billion by the biggest U.S. banks. The deposit injection was a moral suasion deal brokered by US bank regulators and was aimed at strengthening the bank and improving the resilience of the US banking system.

By end-April, the First Republic bank reported its first quarterly earnings report. In the report, the bank reported poor first-quarter earnings with massive deposit outflows. It was revealed that the bank had seen \$100 billion in deposits withdrawn during the first three months of the year, which amounts to more than half of the bank's total deposits. As a result of this news, investors saw how bad the deposit outflows were and they began to sell their shares. The bank witnessed massive selloffs in its share price which plummeted from \$122.50 on the 1st of March 2023 to \$1.80 on the 28th of April 2023 due to concerns about the bank's impending collapse. First Republic witnessed further large deposit withdrawals from the bank as concerns grew over its financial stability following its stock crash to almost zero (see figure 4). First Republic sought a merger solution that does not require the federal government seizing the bank. But the bank could not quickly reach a merger deal with another strong financial institution. This prompted the FDIC to take the bank under receivership and sell the bank to JPMorgan Chase Bank, National Association, Columbus, Ohio, on 1st May 2023 under a purchase and assumption agreement designed to make the new buyers assume all of the deposits and substantially all the assets of First Republic Bank. The next section identifies the effect of 2023 banking crisis.

Figure 4. Stock price crash of First Republic Bank ⁵



⁵ Source: Refinitiv DataStream

5. Effect of the 2023 banking crisis

Widespread reduction in lending – Increase in interest rates in the US tightened financial conditions and led to a banking crisis, and the banking crisis tightened financial conditions even more. This led to a reduction in lending due to widespread fears of a recession.

Loss of investor confidence in the banking sector – The deposit withdrawals, which led to the failure of Silicon Valley Bank and Signature Bank, caused carnage across regional bank stocks. Investors, shocked by how fast a bank can fail, sold their stocks before a bank run could lead to a complete wipeout of the banking system. Despite the assurances provided by FDIC deposit insurance and the assurances made by President Biden, investors' confidence in banks fell very fast during the crisis.

Government borrowing difficulties – The crisis exposed banks' obsession to invest in long-term government bonds in a low interest environment. However, during the crisis, banks were unwilling to buy long-term bonds as readily as before. This would increase the cost of borrowing at a time when most governments are already struggling with high levels of debt.

More inflation – As government borrowing became more difficult due to the banking crisis, central banks could directly purchase more government bonds to provide their governments with the necessary funds. Such bond purchases could increase money supply in circulation and increase inflation. This could make inflation worse than it is already, and pressure central banks to increase interest rates.

Fewer jobs – The crisis led to reduced lending and caused firms to delay hiring decisions or cut existing jobs to save cost. As a result, the level of unemployment increased in the short-term.

Less consumer spending – Tighter credit conditions and rising unemployment affected household income. Households reduced spending during the period of the crisis.

6. Can full deposit insurance prevent a future bank run?

During the banking crisis, President Joe Biden assured all depositors of SVB and Signature Bank that they will get all their deposits in full. He also assured that only the investors and shareholders of the failed banks would lose their funds. President Biden's assurance to depositors suggest that the US government would provide full deposit insurance coverage to all depositors of the failed banks.

The idea of full deposit insurance coverage can be a lasting solution to banking panics, or just wishful thinking (Kuritzkes, Weiner and Schuermann, 2002). There are two main arguments to this. The first argument is that the government, or the FDIC, could potentially insure all customer deposits in full to prevent future bank runs (Diamond and Dybvig, 1983). In theory, this looks like a good solution because depositors no longer need to panic when a bank fails or when a bank is in distress. This argument suggests that full deposit insurance will bring an end to a run-on bank deposit. The second argument rejects the idea of full deposit insurance because it fails to consider the distrust that citizens or depositors have in their governments. When such distrust exists, depositors would panic and there would still be a run-on bank deposits in a distressed bank even if the government provides full deposit insurance. Another problem with full deposit insurance is that it would be both expensive and difficult to get past legislators and politicians who could see full deposit insurance coverage as an attempt to rescue wealthy people ((Kuritzkes, Weiner and Schuermann, 2002). There is also the argument that full deposit insurance should be extended only to too-big-to-fail banks because of their systemic importance. The problem with this idea is that it would make systemic banks safer and make smaller banks become vulnerable since they would not benefit from full deposit insurance. And if depositors understand that bigger banks are safer due to full deposit insurance, there will be migration of deposits from smaller banks to larger banks. This would lead to the swift collapse of many smaller banks, and customers will have fewer banks to choose from once smaller banks no longer exist.

7. Conclusion

This article explored the causes and consequences of the 2023 banking crisis. The crisis showed how rising interest rates exposed the hidden vulnerabilities in the US financial system. As interest rates increased, banks made losses on their portfolio of government bonds. As a result, some regional banks witnessed unprecedented deposit outflows. The losses and deposit outflows triggered funding and liquidity problems in some banks and led to the collapse of four banks – Silicon Valley Bank, Signature Bank, Credit Suisse and First Republic Bank.

The lesson learnt from the banking crisis is that monetary policy tightening can cause problems for banks that have large exposure to government bonds as was the case of Silicon Valley Bank. It was also learnt that news about bank fragility can trigger unprecedented deposit outflows and lead to bank failure as was the case of First Republic Bank. Policymakers, particularly central banks, should be mindful of how monetary policy tightening can amplify the vulnerabilities in the financial system and jeopardize the central banks' efforts to control inflation. Central banks should therefore consider the impact of further increases in interest rates on the stability of the financial system.

The discussion in this paper has some limitations. First, the study did not use empirical data to validate some arguments made in the paper. Second, the paper did not analyse the changes in the balance sheet of the failed banks before and after the rise in interest rates.

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Footnotes

ⁱ During banking crises, depositors withdraw their deposits from banks due to fear of losing all their money, triggering a bank run. A run-on bank deposits makes it difficult for banks to survive a crisis as they will not have access to cheap deposits to fund their normal banking operations. A similar event occurred in 2023 although on a smaller scale compared to the 2008 global financial crisis.

ⁱⁱ Wall Street Journal <https://www.wsj.com/articles/why-is-credit-suisse-in-trouble-the-banking-turmoil-explained-6f8ddb5b>

ⁱⁱⁱ Financial Times <https://www.ft.com/content/072dd83d-232d-4223-9428-801d4437b4f6>