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The Role of Monetary and Fiscal Policies in Recent Bank Failures

Sheila Bair (Chair)
Joyce Chang, Charles Goodhart,
Lawrence Goodman, Barbara G. Novick, and Richard L. Sandor

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Last spring, we witnessed the failures of three mid-sized banks: Silicon Valley (SVB), Signature (SBNY), and First Republic (FRBC). Though representing a fairly small part of the banking system, two of these three failures were deemed "systemic" by federal regulators, and all have engendered considerable public debate and concern about the safety of bank deposits and overall stability of the banking system. A group of senior advisors to the Center for Financial Stability undertook an assessment of the root causes of these failures, with a particular focus on SVB. We also assessed the pros and cons of various proposals for reform. We evaluated the role of monetary and fiscal policies, management failures, supervisory and regulatory lapses, as well as the banks' high reliance on "runnable" liabilities in the form of uninsured deposits. This effort culminated in the preparation of two papers: one dealing with the role of bank management, supervision and regulation, and this one focusing on fiscal and monetary policies. **We are encouraged that both Vice-Chair for Supervision Michael Barr[1] and Governor Michelle Bowman[2] have suggested that third party reviews would be welcome.**

The group represents a wide array of backgrounds in government, academia, and industry and a full range of policy views. While there were differences of opinions on some specific proposals, there was also strong consensus on the main drivers of the failures and key issues related to proffered reforms.

General Observations

There were serious failures in the management and supervision of these institutions as discussed in our complementary paper.[3]

The role that monetary and fiscal policy played in these failures must be acknowledged. The Federal Reserve's "Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank"[4] and its Office of the Inspector General's "Material Loss Review of Silicon Valley

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[1] Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank, Board of Governors of the Federal Reserve System, April 28, 2023.

[2] Michelle W. Bowman, Responsive and Responsible Bank Regulation and Supervision, Board of Governors of the Federal Reserve System, The Salzburg Global Seminar, June 25, 2023.

[3] Sheila Bair et al., Supervision and Regulation after Silicon Valley Bank, Center for Financial Stability, October 16, 2023.

[4] Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank, Board of Governors of the Federal Reserve System, April 28, 2023.

Bank"[5] find fault with SVB management, the supervisory process, and regulation rather than monetary policy. In fact, the word "monetary" does not appear once in the text of the combined 171 pages in the studies by the Fed.

The protracted era of accommodative monetary policy, combined with profligate federal spending enabled by ultra-low interest rates, led, predictably to high inflation and the need for rapid monetary tightening. [6]This increased the risks to banks of holding long-dated government backed securities, even while the regulatory treatment of such assets as highly liquid and "risk free" created strong incentives for banks to do just that. The consequences of escalating interest rates - unrealized market losses on low yielding assets, rising deposit funding costs - are creating significant risk management challenges for the banking system, just as they did 40 years ago when Paul Volcker was forced to raise rates to tame the Great Inflation of that era. Banks today are stronger and better regulated than were the S&Ls during the 1980's, and we believe that the vast majority will be able to weather the storm. Nonetheless, bank executives and supervisors must take into account the changing environment when considering the resiliency of individual banks.

Although problems in the banking system seem to be contained for now, macro and financial market conditions present meaningful and ongoing risks for banks. They include the impact of additional losses in bond markets on bank portfolios, a persistent negative yield curve spread on bank earnings, rapid growth in the fiscal deficit on the efficacy of Fed policy, and signals from equity markets with regional and money center bank stocks down by 30% and 12% since the beginning of the year.

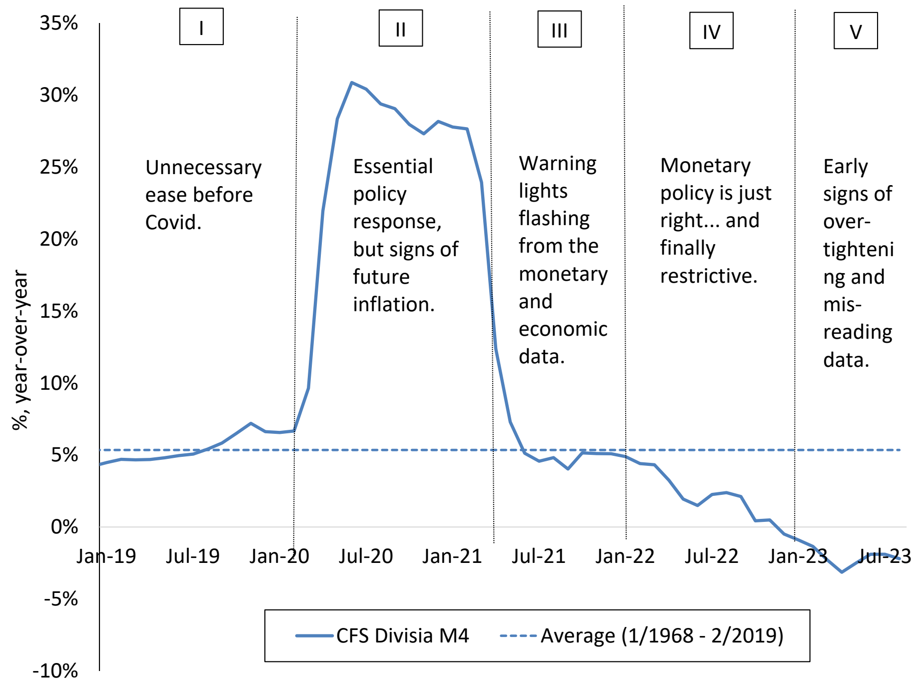
Role of Monetary Policy

An extended period of accommodative monetary policy was at the core of troubles at SVB. The monetary stance was overly accommodative, lasted too long, and led to an over-tightening in early 2023 – which likely accelerated losses at SVB (see Figure 1). In the post-Covid period, the broadest and most important measure of the money supply – CFS Divisia M4[7] – grew by over 10% on a year-over-year basis for over 25 consecutive months. Broad money supply similarly grew by a historic high of 30% or roughly three times its peak monetary growth rate in the 1970s – before the Volcker Fed needed to slam the brakes on inflation.[8]

[5] Material Loss Review of Silicon Valley Bank: Evaluation Report, Office of Inspector General, Board of Governors of the Federal Reserve System, September 25, 2023.
[6] Lawrence Goodman, How the Fed Rigs the Bond Market: Sales by 'vigilantes' used to serve as a warning of inflationary policies. The signal has been muted., The Wall Street Journal, November 18, 2021.
[7] William A. Barnett, *Getting It Wrong: How Faulty Monetary Statistics Undermine the Fed, the Financial System, and the Economy*, MIT Press, 2012
[8] See https://centerforfinancialstability.org/amfm_data.php.

Recent research increasingly shows how money supply (and specifically CFS Divisia measures) provides essential informational content for policy decisions.[9,10,11,12]

Figure 1. The Rise and Fall of Inflation:
Five Phases revealed by CFS Divisia M4 growth



Source: Center for Financial Stability.

Post-Covid monetary policy followed five distinct phases.[13] They include:

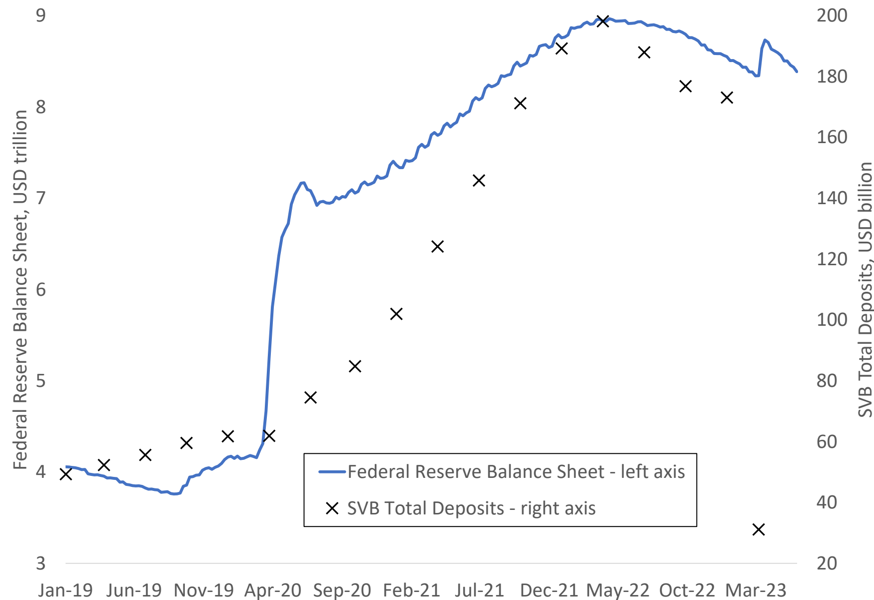
I. Unnecessary ease before Covid.
II. Essential policy response, but signs of future inflation.
III. Warning lights flashing from the monetary and economic data.
IV. Monetary policy is just right… and finally restrictive.
V. Early signs of overtightening and misreading data.

An excessively easy monetary stance in Phases II and III encouraged leverage in the system, where technology firms were the most meaningful beneficiaries. This gigantic inflow of

[9] William A. Barnett, Marcelle Chauvet, Danilo Leiva-Leonx, and Liting Su, "The Credit-Card-Services Augmented Divisia Monetary Aggregates," *Journal of Money, Credit, and Banking*, July 28, 2023.
[10] Michael D. Bordo and John V. Duca, "Money Matters: Broad Divisia Money and the Recovery of Nominal GDP from the COVID-19 Recession," Federal Reserve Bank of Dallas, Working Paper 2306, May 2023.
[11] Claudio Borio, Boris Hofmann, and Egon Zakrajšek, "Does money growth help explain the recent inflation surge?", BIS Bulletin No 67, January 26, 2023.
[12] Isabel Schabel, "Money and Inflation," Thünen Lecture at the annual conference of the Verein für Socialpolitik, European Central Bank, September 25, 2023.
[13] Lawrence Goodman, A Story of Money, Inflation, and the CFS, Center for Financial Stability, June 6, 2023.

liquidity to the tech industry was deposited at the primary bank for these firms, SVB. The deposit surge ultimately pressured SVB to buy assets and seek return. For instance, a doubling in the size of the Federal Reserve's Balance sheet more than tripled total funds deposited at SVB (see Figure 2). Deposit growth at Signature Bank and First Republic Bank followed a similar trajectory (see Appendix 1).

Figure 2. Monetary Policy Swings Drove Total Deposits at SVB



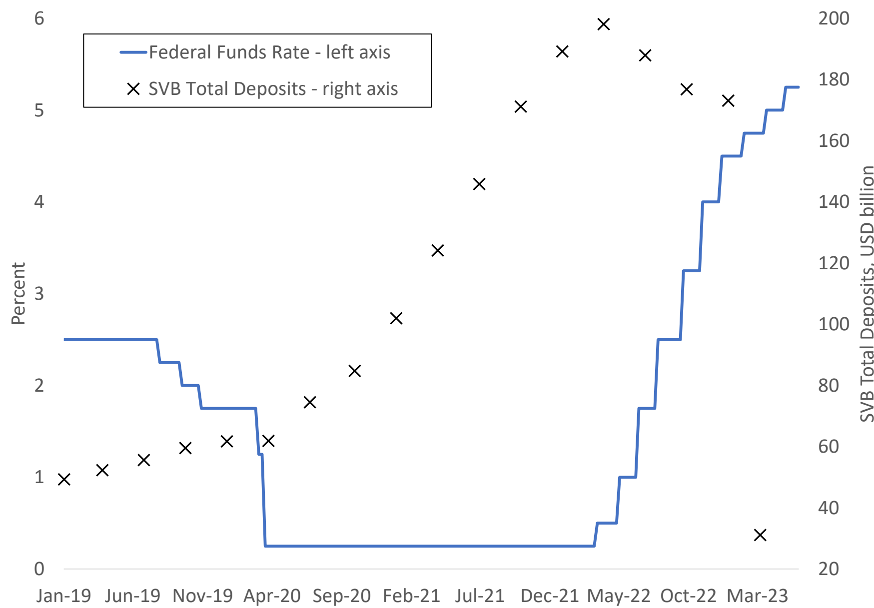
Source: Silicon Valley Bank, Bloomberg, and Center for Financial Stability.

After misdiagnosing inflation as "transitory" for nearly a year before action was taken, rapid increases in the Federal Funds rate were required to fight inflation of 3 to 4 times the Fed's target.[14] The sharp tightening hit technology companies especially hard. These companies found it necessary to withdraw their funds deposited at SVB in Q3 2022 to meet fixed expenses and payrolls (see Figure 3). On the asset side of the balance sheet, delayed monetary policy tightening triggered a 30 point drop in medium term bond prices and a swift deterioration in SVB asset values.

The equity market was aware of risks at SVB. The stock price fell by 74% from a peak in November 2021 to a pre-restructuring trough in December 2022. This equity hit to capital further deepened the hole on SVB's balance sheet through Phase IV (see Figure 4).

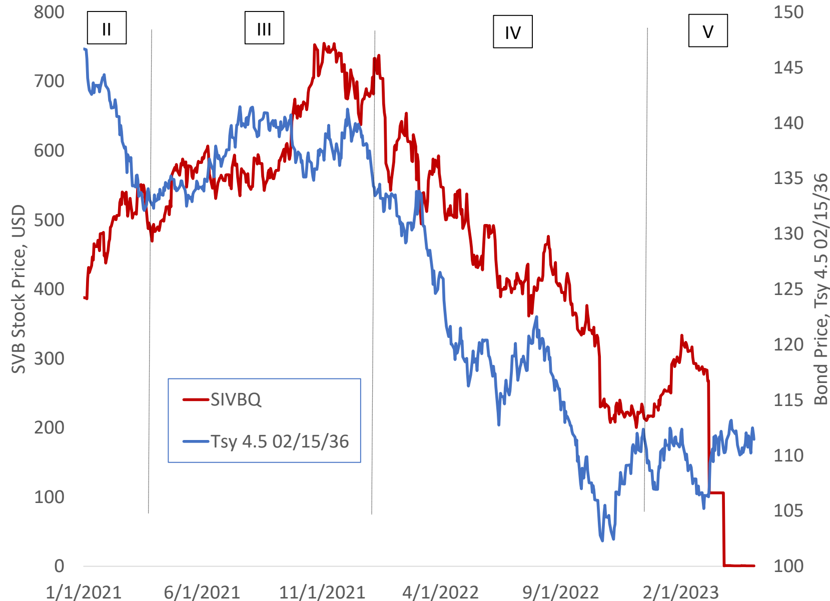
[14] Lawrence Goodman, Markets and Volatile Monetary Policy: Empirical Lessons from Banking Instability, Center for Financial Stability, June 12, 2023.

Figure 3. Total Deposits at SVB and the Federal Funds Rate



Source: Silicon Valley Bank, Bloomberg, and Center for Financial Stability.

Figure 4. Treasury Bond and Silicon Valley Bank (SIVBQ) Stock Prices



Source: Bloomberg and Center for Financial Stability.

In Phase V, **SVB's losses on its Treasury holdings and a corresponding flight of deposits likely accelerated dramatically beginning shortly after February 2, 2023 and extending to March 8, 2023**, due to an inaccurate read on faulty seasonally adjusted data coincident with the sixth warmest winter since 1895 and an overly rapid reaction by the Fed. For instance, the Fed waited over eight long months to respond to inflation, macro, and monetary data before policy tightening in early 2022. In contrast, in early 2023, the Fed waited less than one month.

Although problems in the banking system seem to be contained for now, macro and financial market conditions present meaningful and ongoing risks for banks. They include:

- **Bond market loses with an additional 1.3% increase in the yield on the 10-year Treasury bond since the SVB crisis.** This compares with a 2.5% lift in the yield from January 2022 to its peak just before the SVB crisis.

- **Bank earnings remain under pressure** with a zero to negative yield curve spread over the last 10 months – as measured by the difference between the yield on the 10-year Treasury bond and the Federal Funds rate. In other words, banks now need to pay more on CDs and money market funds than they can earn by holding Treasury bonds.

- **The fiscal deficit is now $1.5 trillion in the first 11 months of fiscal year 2023 or $0.6 trillion deeper in the red than during the same period last year.** The fiscal expansion minimizes the impact of Fed tightening or forces the Fed to more aggressively lift interest rates in its fight against inflation. Either way, the fiscal expansion puts upward pressure on interest rates – further damaging bank portfolios.

- **Lastly, the equity market is signaling that risks remain.** Regional and money center bank stock prices are barely up off of their post SVB crisis lows. Similarly, the S&P regional and money center bank equity indexes are down by 31% and 12% respectively since the beginning of the year. In contrast, the S&P 500 equity index is up by 13%.

Likewise, there is substantial longer-term uncertainty about deposit flight and additional market losses on underwater securities holdings – due to the lagged impact of monetary policy tightening on markets and the economy. Real estate markets, particularly CRE/office, and risks in private markets and the nonbank financial system, are also of concern as they have been heavily reliant on low interest rates for financing. **Private markets are especially important, as maturity and credit transformation activities are less transparent. Yet, here, it is essential for regulators and officials to differentiate among nonbank financial institutions based on their activities.** For instance, pension funds and asset managers are non-banks. Neither is reliant on low interest rates.

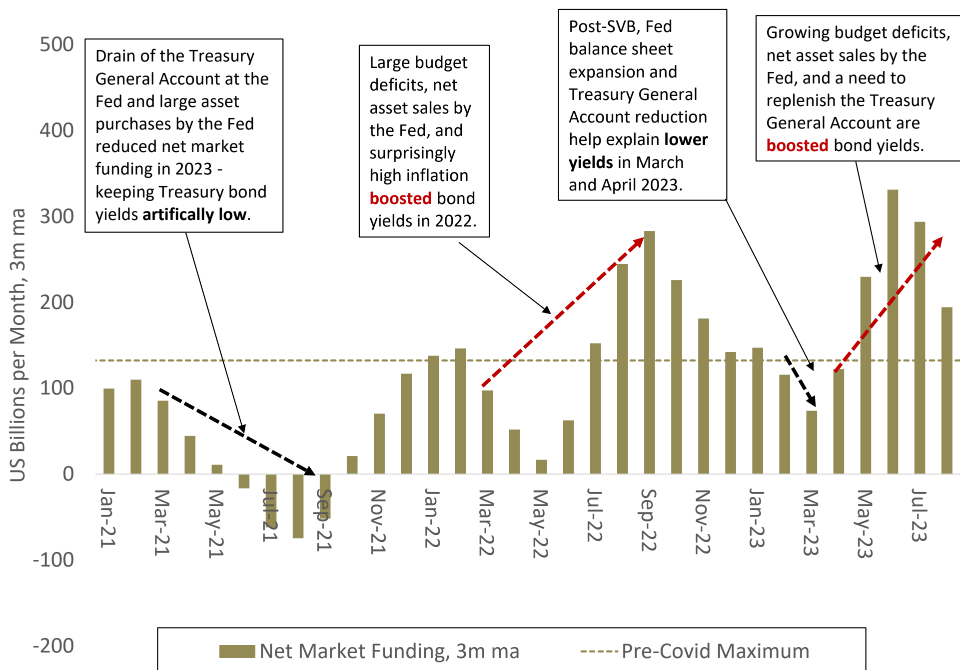
Excessive Fiscal Stimulus Made the Fed's Job Harder

Excessive fiscal stimulus played a role in the surprisingly high inflation[15,16] and financial spillover to SVB and other banks. Extraordinary government expenditures provided direct transfers to consumers that were spent.

[15] Thomas J. Sargent and Neil Wallace, Some Unpleasant Monetarist Arithmetic, Federal Reserve Bank of Minneapolis, Quarterly Review, Fall 1981.
[16] John H. Cochrane, Fiscal Histories, Journal of Economic Perspectives, Volume 36, Number 4, Fall 2022.

There was broad agreement on the contributions of monetary policy to financial stress. However, some more actively emphasized the ill-calibrated fiscal policy. The US budget deficit reached 15.4% of GDP in 2020 and 10.6% in 2019 or several times the 3% of GDP upper limit in the Eurozone and the 4% safe benchmark common in emerging market economies. Although a large response was essential, three waves of COVID stimulus followed, with even the first too big and too poorly targeted. Then two waves of short-term stimulus followed through the Infrastructure Investment and Jobs Act and the Inflation Reduction Act. Excess stimulus made significant additions to the upward pressure on inflation in the short term.

Figure 5. Reliance on Markets for Treasury Funding



Source: U.S. Treasury, Federal Reserve Board, and Globalecon LLC.

Others believe that fiscal profligacy was facilitated by monetary policy that artificially kept borrowing costs extremely low by the Fed's purchase of U.S. Treasury bonds. In fact, the net reliance on financial markets for Treasury funding – which incorporates budget deficits, Treasury General Account flows, and Federal Reserve Sales or Purchases of Treasury debt – illustrates the impact of monetary and fiscal policy on changes in Treasury interest rates (see Figure 5). In much of 2022, large budget deficits and net asset sales by the Fed (or Quantitative Tightening) boosted the demand for Treasury financing from the markets as well as 10-year Treasury bond yields. In contrast, Fed balance sheet expansion after the SVB crisis and a reduction in the Treasury General Account temporarily offset the demand for market funding on the heels of large budget deficits. This explains lower bond yields through May 2022 and a 2023 low in yields during March.

Lessons for Financial Stability

Unfortunately, monetary policy setters fell short of adequately taking into account the impact of monetary policy on financial stability. They are overwhelmingly focused on the idea of a dual mandate – seesawing back and forth between the two poles of inflation and employment. It is easy for officials to operate within this framework as well as explain it to the public. However, this is a mistake.

A clear linkage to the financial system is absent. Many Financial Crisis Indicators (FCIs) – developed after the 2007-08 financial crisis to illustrate system stress – help. However, they are coincident indicators – at best. **Similarly, over-reliance on high frequency coincident indicators risks tethering monetary policy to the markets.**

The group also discussed inflation targeting and communication. Over recent years, most advanced central banks have claimed that both inflation and nominal interest rates would remain lower for longer; and that any increase in inflation and interest rates would, initially in 2021, be quite limited, and throughout would be short lived. Both SVB, and LDI in the UK, would have been highly profitable had central bank forecasting been correct. Bankers are, perhaps, more likely to follow the predictions of central banks than either firms or households. So, bank portfolios may tend to rely on forecasts outlined by the central bank. While central bank credibility is generally good, it may lead to undue concentrations in the financial system. **Recent research highlights how diversity of financial exposures is key to resilience.**[17]

Inflation targeting does not necessarily lead to financial instability. What does contribute to financial instability is keeping rates low to negative in pursuit of an inflation target, notwithstanding the buildup of leverage and inflated asset valuations in the system. **The new policy of average inflation targeting may have further reduced financial stability by meaningfully widening the range of potential outcomes under which the Fed would maintain an accommodative stance,**[18] **while reducing transparency, and increasing excess monetary volatility.**

Groupthink: Challenges and Solutions

Groupthink is a big issue for central banks and official institutions. For instance, the IMF's Independent Evaluation Office identified groupthink as a major contributor to their own institution's shortcomings in advance of the Global Financial Crisis in 2008.[19] Diversity of

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[17] Jon Danielsson, The Illusion of Control: Why Financial Crises Happen, and What We Can (and Can't) Do About It, Yale University Press, New Haven and London, 2022.
[18] Gauti B. Eggertsson and Don Kohn, The Inflation Surge of the 2020s: The Role of Monetary Policy, Brookings Institute, May 23, 2023.
[19] IMF Performance in the Run-Up to the Financial and Economic Crisis: IMF Surveillance in 2004-07, Independent Evaluation Office of the IMF, 2011.

opinion and constructive dissent are helpful.[20] There is very little dissent. Arguably, groupthink at the Fed stood in the way of earlier tightening to keep inflation well below its recent peak of 9%.

But, what is the most effective and efficient way to integrate free – but thoughtful and analytically sound thinking into a complex organization such as the Fed or other central banks? Here, the group offered thoughts about optimal procedures as well as efforts to foster a culture that encourages diverse views.

To be sure, challenges exist. **Many central bankers are either looking at the same model or they are reliant on others who provide them results from the same model**, which assumes a return to equilibrium in two years unless credibility is lost. The financial sector is inadequately specified in many of the models used by central bankers and market participants alike.

Another uncomfortable issue raised by a few members of the group is the pressure to get behind a consensus view rather than constructively express dissent. Many Fed officials have very similar education and training. They then work with and for each other in various combinations (i.e. move from FRBNY to FRB to IMF to ECB, etc.) and they go in and out of academia. The revolving door has career implications and there is pressure to support a consensus view rather than express dissent.

The majority of the group noted that voting procedures are crucial to counter groupthink. Many constructive changes have developed over time. For instance, in the early days of independence of the Bank of England, Governor Eddie George purposefully had the chief economist set out policy options first with the Chair voting last to promote individuality. Similarly, Governor Mervyn King follow suit with the self-confidence to vote last and occasionally dissent from the prior majority. It did him no harm. As a formal matter, the Federal Open Market Committee (FOMC) votes proceed with the Chair both speaking and voting last.

Yet, efforts to promote diverse views remained constrained by culture. For instance, the results of FOMC meetings are often negotiated in advance especially as transcribed minutes will remain forever etched in stone after their public release in 5 years.

Hence, to diminish the risk of policy errors and cultural biases, central bank leadership can immediately facilitate an openness to varying analytically tested and rigorous ideas via engagement with staff and at the Board level. Yet, there should be clear constraints to freewheeling, or worse, partisanship. An idea simply to be different or support a personal policy agenda should fail the test.

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[20] Charlan Jeanne Nemeth, Joanie B. Connell, John D. Rogers and Keith S. Brown, Improving Decision Making by Means of Dissent, Journal of Applied Social Psychology, 31: 48-58. July 2006.

Over a longer period of time, a few group members believe that central bank leaders should be more accepting of dissent at the Board level. For instance, at some stage, perhaps the FOMC should operate much more like the Supreme Court, where dissents and split votes are common, and it not an earth-shattering event or even particularly noteworthy when the Chief Justice or the Chair is in the minority.

To be sure, there is a widespread Central Bank view that a consensus decision has more weight with market opinion than a majority decision. However, central bankers can lead market opinion about policy over time. **Certainly, a push for consensus – when everything is so uncertain – is itself undesirable.**

Conclusion

In this report, we have tried to undertake an objective assessment of the facts and issues associated with role of monetary policy in recent bank failures, finding agreement on a number of points, and amicable disagreement on others. As the public policy debate continues to unfold over banking reform, we hope government policy makers will similarly undertake an assessment that is nonpartisan, collegial, and driven by the facts. Our findings are summarized below:

- **The group concluded that the role of monetary and fiscal policies in these bank failures must be acknowledged.**

- **The Fed should use money supply measures to map the transmission of Fed policy into financial institutions, markets, and the real economy.**

    - **Money supply simply measures the transmission of Fed policy through financial institutions and markets into the real economy.** For instance, banks play a unique and fundamental role in the transmission of monetary policy because deposits in banks can be loaned out, effectively "creating" money. Monetary and credit aggregates help measure these activities and broad monetary aggregates will even provide a picture of activity in the nonbank financial system.

    - **Excess money supply volatility spurs banking and financial crises**, which prevents the economy from reaching its long run potential.

    - **Money supply measures should be used in conjunction with other traditional variables. They should not be targeted.**[21]

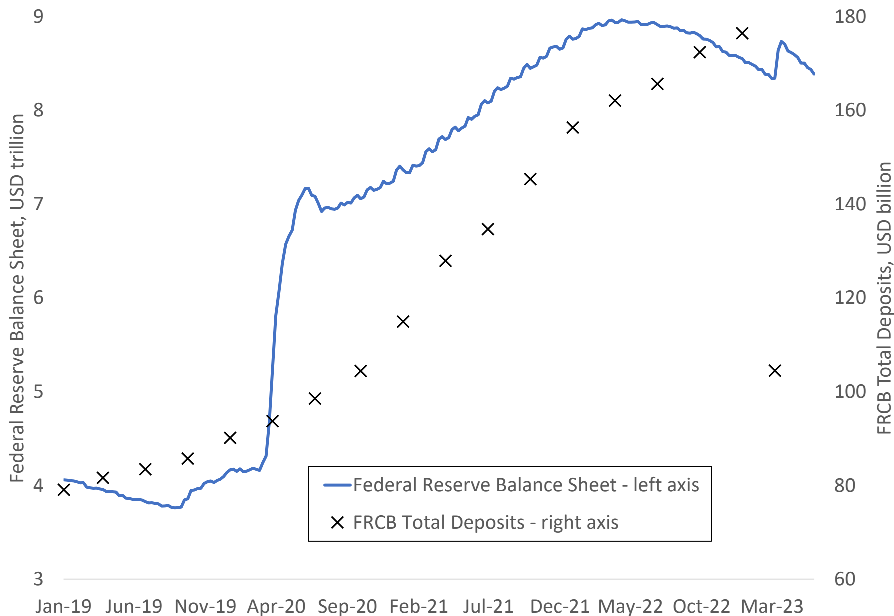
[21] Goodhart, Charles (1975). "Problems of Monetary Management: The U.K. Experience." In Anthony S. Courakis (ed.). Inflation, Depression, and Economic Policy in the West, Totowa, New Jersey: Barnes and Noble Books, 1981, p. 116.

- **The group also concluded that the Fed must better define the oft-used phrase "data-dependent" and then act in concert with data released over a defined period of time.**
  - **The Fed's misdiagnosis of inflation was a major driver behind 1) the rapid deposit growth and then depletion at SVB as well as 2) swings in the value of SVB's Treasury bond holdings in 2021 and 2022.**
  - **A truly data-dependent stance would have urged a tightening of policy in April 2021 and an easier stance in February 2023.**
- **The group also concluded that Fed leadership should actively work to thwart groupthink to diminish the risk of future policy errors.**
  - **The majority of the group noted that voting procedures are crucial to counter groupthink. Many constructive changes have developed over time. Yet, efforts to promote diverse views remained constrained by culture.**
  - **Over a longer period of time, a few group members believe that central bank leaders should be more accepting of dissent at the Board level. Certainly, a push for consensus – when everything is so uncertain – is itself undesirable.**

Crucially, the addition of better data and analytics – such as CFS Divisia money supply metrics – would help develop a more reliable and accountable data-dependent framework for policy design. An added benefit would be clearer communication with the public on Fed policy and – most importantly - financial stability.

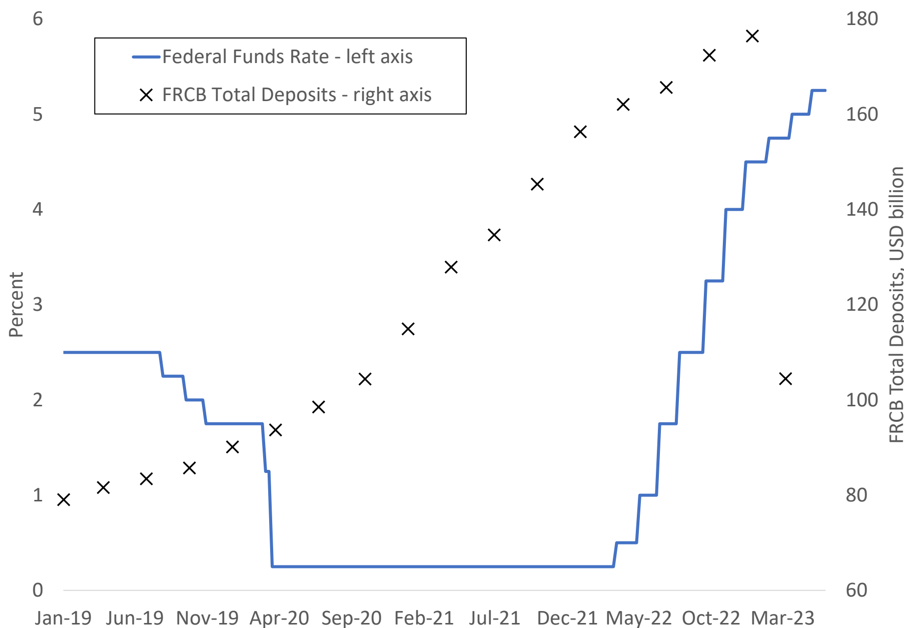
Appendix 1. Monetary Policy Swings Drove Bank Deposits at FRBC and SBNY

Figure 6. Total Deposits at First Republic and the Fed's Balance Sheet



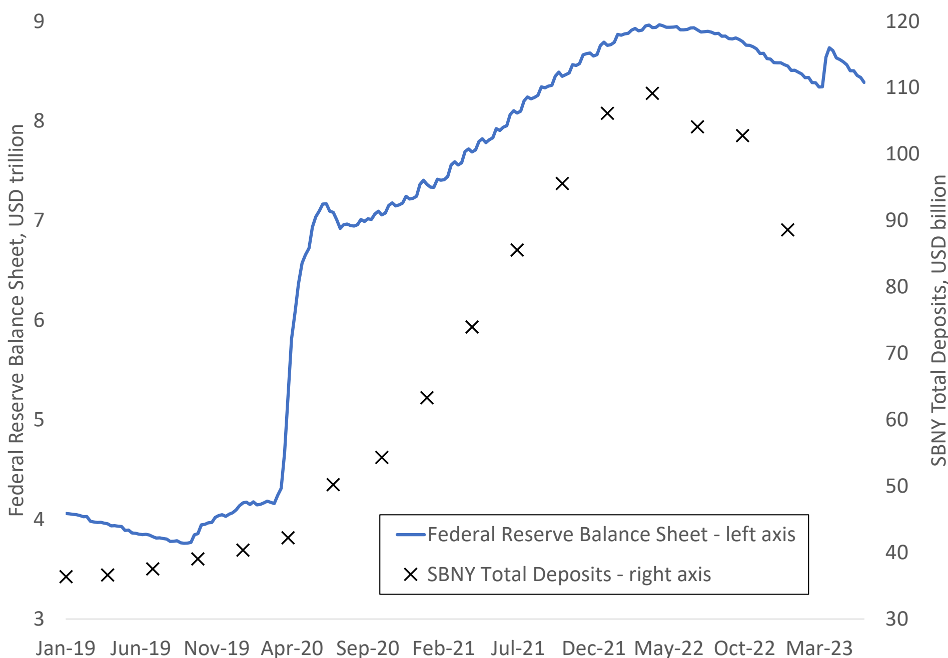
Source: First Republic Bank Corporation, Bloomberg, and Center for Financial Stability.

Figure 7. Total Deposits at First Republic and the Federal Funds Rate



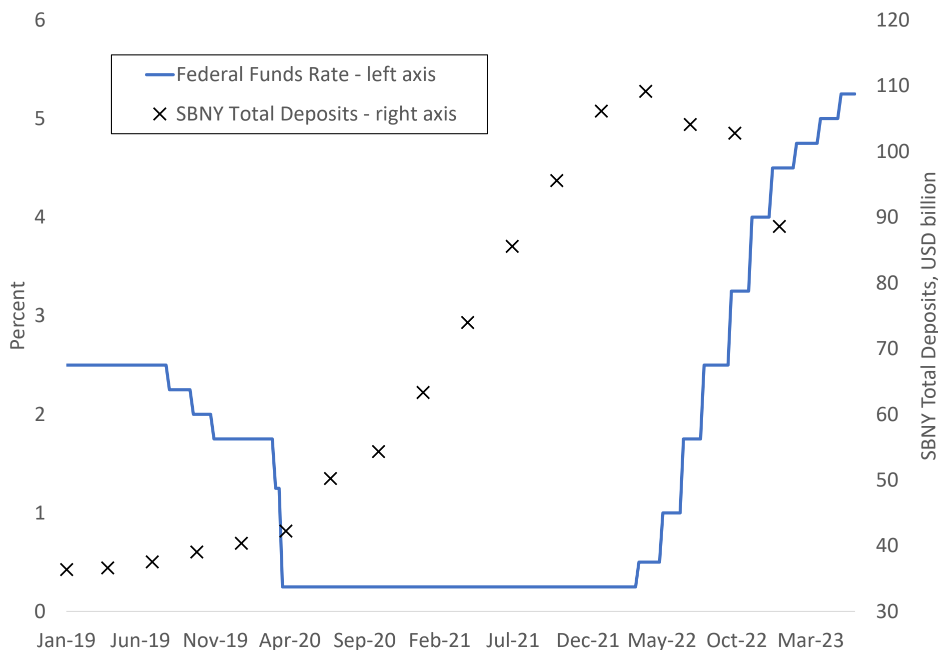
Source: First Republic Bank Corporation, Bloomberg, and Center for Financial Stability.

Figure 8. Total Deposits at Signature Bank and the Fed's Balance Sheet



Source: Signature Bank, Bloomberg, and Center for Financial Stability.

Figure 9. Total Deposits at Signature Bank and the Fed's Balance Sheet



Source: Signature Bank, Bloomberg, and Center for Financial Stability.

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