


Research Article

Cite this article: Kaplan SB. The Fed's Financial Stability Paradox: The Political Economy of Central Bank Mandates in the United States. *Studies in American Political Development* (2026): 1–13. <https://doi.org/10.1017/S0898588X26100339>

Email: sbkaplan@gwu.edu

The Fed's Financial Stability Paradox: The Political Economy of Central Bank Mandates in the United States

Stephen B. Kaplan 

Department of Political Science, the Elliott School of International Affairs, and the Institute for International Economic Policy (IIEP) at George Washington University, Washington, DC, USA

Abstract

Following the 2008 financial crisis, the Federal Reserve restored its historic financial stability mandate with new monetary tools to help mitigate the credit crunch and stimulate the economy. This article develops a new theory about how political constraints facing monetary institutions limit the effectiveness of these tools. It develops the concept of the Fed's *financial stability paradox*, suggesting that the central bank's implicit financial stability goals can complicate its ability to meet its dual mandate of full employment and price stability. In a highly financialized world, the Fed often provides easy credit with exceptional monetary instruments, such as quantitative easing, to contain financial instability. Without sufficient regulatory tools, however, these monetary actions risk stoking moral hazard and fueling financial fragility. To test these theoretical priors, this article conducts a plausibility probe of the 2023 regional banking crises, finding that political constraints reduced the feasibility of more traditional banking supervisory powers, placing the financial stability onus disproportionately on the Fed's quantitative easing.

1. Introduction

On a Sunday afternoon in September 1920, a horse-drawn carriage swerved unexpectedly and stopped suddenly in front of financial titan J.P. Morgan's Wall Street fortress. Within a New York minute, a startling blast bombarded the block, butchering throngs of bystanders. Blame was swiftly cast by the crowd and other commentators, toward culprits ranging from communist sympathizers and Italian anarchists to financial hitmen. Despite the multitude of theories about possible suspects,¹ the case of the 1920 Wall Street bombings remains one of the FBI's biggest unsolved mysteries today. A century later, another eruption rocked Wall Street's architecture, this time decimating the U.S. economy. However, in the hunt for culprits involved in the outbreak of the 2008 global financial crisis, yet another crime was left unresolved.² Potential perpetrators ranged from investment banks and investors, mortgage brokers and rating agencies, to regulators and deregulators,³ but this article suggests the answer may reflect the politics of central bank mandates.

For almost half a century, the Fed has officially targeted a “dual mandate” of “maximum employment” and “stable prices” following the 1977 Federal Reserve Reform Act.⁴ Informally, however, scholars find the Fed had disproportionately prioritized inflation control over full unemployment in the decades preceding the 2008 financial crisis.⁵ Despite its full employment mandate, the 1970s price shocks helped forge a partisan consensus, including a post-war macroeconomic regime,⁶ which favored inflation control.⁷ On balance, historically low unemployment allowed the Fed to maintain this monetary posture without much political scrutiny during the Reagan–Clinton era. However, the reliance on central banks as inflation fighters often meant underinvesting in public goods that protected Americans from economic downturns.⁸ For example, in the 1980s to 1990s, Congress emphasized deficit reduction to lower the national debt, leaving the government less likely to use fiscal fire power to stimulate the economy.

© The Author(s), 2026. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

¹Federal Bureau of Investigation (FBI). *Wall Street Bombing of 1920*.

²Stiglitz 2009.

³Ibid.

⁴*Federal Reserve Reform Act*, Public Law 95-188, 91 Stat. 1387–91 (1977). Codified as amended in sections, 12 U.S.C. See <https://fraser.stlouisfed.org/title/federal-reserve-reform-act-1977-1040>.

⁵Kaya et al. 2019.

⁶Hopkin and Blyth 2019.

⁷Binder and Spindel 2017.

⁸Roberts 2020.

In 2008, when the United States experienced the most severe economic shock since the Great Depression, it strained the federal government's capabilities and increased the economy's reliance on the Federal Reserve to restore normalcy. The Fed employed extraordinary monetary measures, dubbed quantitative easing (QE), to stimulate the economy and exit the financial crisis. However, its renewed institutional focus on financial stability complicated its historical dual mandate.⁹

This article examines how political constraints facing monetary institutions leave central banks with fewer policy tools to address the financial complexities of the current economy. It develops a theoretical framework, dubbed the *financial stability paradox*, contending that a structural shift in the U.S. economy has created a political consensus that favors financial stability. The financialization of the U.S. (and global) economy over the last several decades, since the Bretton Woods era,¹⁰ has amplified the power of financial institutions. The duality of Clinton-era deregulation and Greenspan's easy money catalyzed the transformation of the banking industry from straightforward lending toward highly leveraged securitization. This financial complexity created a policymaking tension, characterized by "too big to fail" financial institutions that made the economy vulnerable to systemic risk but also dependent on a "global financial safety net."¹¹ In an environment of policy uncertainty and inconsistency,¹² the Fed became reliant on monetary policy to hedge systemic risk, given the political constraints to bolstering the Fed's supervisory and regulatory powers.

This implicit financial stability target has complicated the Fed's ability to meet its dual mandate of full employment and price stability. To achieve financial stability, it tends to maintain easy credit conditions for longer than optimal, ironically sowing the seeds for future moral hazard problems and greater financial fragility in the economy.

To examine these theoretical priors, I conduct a plausibility probe of the *financial stability paradox* by employing the case of the 2023 U.S. banking crisis, where regional banks with assets totaling more than \$500 billion collapsed over ten turbulent weeks. The catalyst for the crisis had been an unexpectedly higher interest rate environment in 2022. After maintaining an accommodative approach to promote financial stability in the wake of the pandemic, the Fed shifted to aggressively tightening policy, including reversing its QE balance sheet expansion. According to the Federal Open Market Committee (FOMC)—the Fed's primary monetary policymaking body, "employment and inflation objectives are generally complementary."¹³ However, 2022 provided an exception to this rule, "with unemployment near historical lows but inflation at its highest level in four decades," meaning the Fed's approach to its dual mandate "implied a forceful tightening of monetary policy."¹⁴

⁹This chapter builds on similar arguments made about such trilemmas, including Mohamed El-Erian's (2023) popular discussion about "the Fed fac(ing) an intensified trilemma: how to reduce inflation, maintain financial stability, and minimize the damage to disruptions to growth and jobs"; also see Kaplan (2024), Obstfeld (2015), and Schoenmaker (2011) for other financial trilemmas.

¹⁰Helleiner 2019.

¹¹Helleiner 2025.

¹²Nelson and Katzenstein 2014; Grabel 2019, 2022.

¹³Statement on Longer-Run Goals and Monetary Policy Strategy, Board of Governors, Federal Reserve System. https://www.federalreserve.gov/monetarypolicy/files/fomc_longerrungoals.pdf.

¹⁴Lisa M. Cook, "The Dual Mandate and the Balance of Risks," Speech at Department of Economics, Harvard University, Board of Governors, Federal Reserve System, March 25, 2024.

Ironically, the Fed's hope of providing financial stability through sustained QE contributed to excess monetary stimulus that eventually sowed the seeds for the 2023 regional banking crisis. A powerful financial sector and a bipartisan consensus in favor of deregulation also limited the role of banking supervision. During the 2020 pandemic, the Fed had formalized a new inflation targeting approach, dubbed Flexible Average Inflation Targeting (FAIT).¹⁵ After almost a decade of inflation-targeting that left inflation below its 2 percent target, the FAIT regime aimed to give the Fed more policymaking discretion, allowing for a more accommodative approach.¹⁶ While an accommodative QE stance was meant to stimulate the pandemic economy, it also helped incentivize the creation of a series of financial business models that relied on low interest rates, leaving many regional banks unprepared for a tighter credit environment in 2022–2023.

In the next section, we'll first examine why the Fed returned to a financial stability focus that muddled its dual mandate, which had historically helped the institution achieve several decades of low inflation and unemployment. The paper will then assess how the financialization of the U.S. economy raised the political saliency of financial stability in the monetary institution, which has important implications today. After these public bankers were delegated monetary policy autonomy at the turn of the twentieth century to insulate the economy from political pressures,¹⁷ this paper suggests that a different policymaking tension between technocracy and democracy is unfolding in the twenty-first century.

The Fed's depoliticization has shown its technocratic limits,¹⁸ amid increased public scrutiny about its concentrated economic power. However, the central bank's technocratic autonomy also provides long-term economic stability, and a critical democratic check,¹⁹ amid creeping political pressure on the Federal Reserve in 2025. The Trump administration's attempts to influence monetary policy—including criticizing the Fed's interest rate decisions, calling for a White House review of Fed independence,²⁰ and seeking to remove Fed Governor Lisa Cook—risk undercutting the Fed's institutional autonomy. Ironically, Trump's renewed deregulation push and inflation-inducing protectionism also intensifies the onus on the Fed to offset any economic headwinds, further complicating its dual mandate mission. Its success as a monetary institution in the twenty-first century—and ability to deflect these growing political pressures, however—likely reflects the extent to which it can continue to use a few monetary policy tools to simultaneously bolster job markets, tame inflation, and stabilize the economy.

2. Theoretical framework: the politics of the Fed's mandate

The political saliency of different elements of the Fed's institutional mandate has changed over time, often affecting the boundaries of the Fed's operational environment. The 2008 financial crisis renewed the Fed's century-old financial stability focus, shifting

¹⁵"New Economic Challenges and the Fed's Monetary Review," Chair Jerome H. Powell Speech, Board of Governors of the Federal Reserve System, August 27, 2020.

¹⁶Inflation could hover above its target, provided the Fed maintained a 2 percent long-run average.

¹⁷Broz 2002; Broz and Frieden 2001; Keefer and Stasavage 2003.

¹⁸Best 2024; Moschella 2024.

¹⁹Dargent et al. 2025; Monnet 2024; Bodea and Garriga 2022; Garriga and Rodriguez 2023; Bodea and Hicks 2015.

²⁰"Trump Allies Draw Up Plans to Blunt Fed's Independence." *Wall Street Journal*, April 26, 2024.

the contours of the political consensus around a dual mandate of full employment and price stability that had emerged after the 1970's stagflation, or decimating combination of high inflation and stagnant growth.

2.1. How's the Fed's institutional mandate evolved historically

Today, U.S. law states that financial stability is not under the formal domain of any single agency, which the Federal Reserve publicly recognizes.²¹ Informally, however, the Federal Reserve includes promoting "the stability of the U.S. financial system" among its primary functions on the Board of Governors' website.²²

The original Federal Reserve Act was primarily concerned with granting banking supervisory powers to the newly minted central bank in 1913, after the *Panic of 1907*. However, a series of related financial stability functions, including acting as a lender of last resort and regulating banks, were also key Fed responsibilities since its inception.²³ For example, the Federal Reserve Act created the Federal Reserve Banks, which were twelve banking entities whose primary purpose was to regulate private banks and provide collateral-based liquidity in their geographic districts.²⁴

However, this institutional mandate evolved in response to the political and economic climate. For example, when the act was reformed in 1977, the political environment had increasingly prioritized economic security over the financial stability focus earlier in the century. The passage of the Federal Reserve Reform Act of 1977 marked the culmination of more than half a century of congressional concern about full employment.²⁵ Catalyzed by the 1970's stagflation, Congress amended the 1913 law to raise the Fed's accountability for governing the economy. After struggling with more than a decade of high inflation and unemployment, the 1977 Act endowed the central bank with an explicit "dual mandate" of "maximum employment" and "stable prices."²⁶

2.1.1. The great inflation and the dual mandate's origins

Central bank mandates thus tend to reflect political support, which can shift over time depending on economic context and political coalitions.²⁷ For example, in the late 1970s, the United States had not experienced a major financial crisis since the Wall Street Crash of 1929, and the most salient recent shock was the *Great Inflation*. Not only was the inflation shock a defining twentieth-century moment, but it helped condition a political consensus in favor of central bank reform. Binder and Spindel (2017) find that the 1980's price shocks helped forge a new partisan consensus in favor of inflation control; and hence, Fed Chairman Volcker's anti-inflation policies.

Before establishing the "dual mandate," the Fed's price stability mandate, along with its institutional autonomy, was often obstructed by political expediency. Presidents Johnson and Nixon had both pressured the Federal Reserve to ease interest rates during the late 1960s and early 1970s, respectively, with Nixon most

famously imploring Fed chairman Arthur Burns, "we'll take inflation, if necessary, but we can't take unemployment ... I'm counting on you, Arthur, to keep us out of recession!"²⁸ From Burns' perspective, these "political currents"²⁹ were the "anguish of central banking," that left the Fed "behind the curve" in taming inflation by the mid-1970s.

More generally during this period, the U.S. Federal Reserve faced political pressure to help finance the country's growing budget deficits. Nixon, despite his fiscally conservative Republican roots, took the budgetary baton from the Johnson administration and continued to spend liberally on both Great Society initiatives³⁰ and the Vietnam War. A series of shocks, including the United States' 1971 Bretton Woods dollar delinking and twin oil crises (1973 and 1978), further fueled inflation and opened the door to Fed Chairman Volcker's 1979 appointment.

By this point in the decade, Volcker swiftly aimed for inflation control, saying the central bank had "no choice but to deal with the inflationary situation because over time inflation and the unemployment rate go together ... Isn't that the lesson of the 1970s?"³¹ Volcker's anti-inflation program not only curtailed inflation, but also appeared to strengthen the Fed's informal independence after initially securing its formal legal autonomy decades earlier through the 1951 Accord.³² By aggressively raising interest rates, Volcker's Fed helped shrink the inflation rate from its 1980 peak of 14 percent to a manageable 4 percent by the end of 1982. What halted inflation? Ideology, institutions, or politics? Some scholars point to Volcker's ideological roots in monetarism and willingness to target the money supply, others suggest his autonomous approach to policymaking helped boost central bank independence, and yet other scholars insist that Volcker benefited from a political consensus for monetary tightening in an era of stagflation.³³

Notably, price stability remained at the center of the monetary policy mission throughout the next few decades, notwithstanding the Fed's dual mandate. The low economic volatility (e.g., sustained growth and low inflation) of the *Great Moderation* era had insulated the Fed from political pressures or public scrutiny about its operational mandate. Historically, low levels of unemployment³⁴ also allowed the Fed to focus on price stability without much political cost. For example, central bank officials rarely referenced the Fed's dual mandate, positing that "price stability was the surest way for monetary policy to keep unemployment down."³⁵ In line with this official posture, transcripts from the Fed's monetary policy meetings showed that the FOMC³⁶ disproportionately prioritized inflation compared to unemployment metrics from 1960 to 2010.³⁷ FOMC deliberations exerted more frequent references to inflation control, even after the Humphrey Hawkins' Act of 1978 reinforced

²⁸ Greider 1989; The Nixon Tapes at the National Archives and Records Administration, College Park, Maryland.

²⁹ Binder and Spindel 2017, Chapter 6.

³⁰ Great Society initiatives were aimed at ending poverty, urban renewal, reducing crime, abolishing inequality, and improving the environment.

³¹ Meltzer 2009.

³² Binder and Spindel 2017.

³³ Ibid.

³⁴ Unemployment averaged 5.5 percent for 2 decades before the 2008 crisis, below its 11 percent pinnacle in 1982.

³⁵ Taylor 2011.

³⁶ The FOMC formulates monetary policy, including examining the risks to its dual mandate of price stability and full employment. <https://www.federalreserve.gov/monetarypolicy/fomc.htm>.

³⁷ Kaya et al. 2019.

²¹ Haltam and Weinberg 2017.

²² For further details, see <https://www.federalreserve.gov/aboutthefed/the-fed-explained.htm>

²³ Conti-Brown 2016, Chapter 7.

²⁴ Ibid.

²⁵ Binder and Spindel, 2017, Chapter 6.

²⁶ *Federal Reserve Reform Act*, Public Law 95-188, 91 Stat. 1387-91 (1977). Codified as amended in sections, 12 U.S.C. See <https://fraser.stlouisfed.org/title/federal-reserve-reform-act-1977-1040>.

²⁷ Moschella 2024; Best 2024; Binder and Spindel 2017.

the full employment element of the Fed's dual mandate with explicit targets for both unemployment and inflation.³⁸

Formally, the Fed views these two objectives as “complementary,” reflecting a “balanced approach” to its monetary policy framework.³⁹ Informally, however, the Fed has the discretion to prioritize one of the two objectives, subjecting it to political criticism that threatens to erode its independence.⁴⁰ This pattern is most common during crises, when economic shocks tend to condition how central banks approach the inflation-unemployment tradeoff. Historically, inflationary shocks have tended to promote orthodox policies emphasizing price stability, while deflation is often associated with heterodox policies emphasizing growth and jobs.⁴¹

2.1.2. *The great deflation and the growing politicization of the dual mandate*

The 2008 financial crisis unleashed a deflationary shock, known as the *Great Recession*, that amplified the political saliency of unemployment and rekindled partisan debates about the Fed's dual mandate. Although financial stability was not an explicit part of the dual mandate, the crisis was also the catalyst for the growth of the Fed's implicit financial mandate.

Despite gaining its technocratic reputation from broad political and public support over time,⁴² the 2008 crisis underscored the fragility of the Fed's depoliticization.⁴³ An institutional economics literature long claimed that formal rules,⁴⁴ such as inflation targeting, could help insulate central banks from political pressures and achieve price stability. However, an emerging scholarship instead suggests that central bank independence requires ongoing political legitimacy.⁴⁵ Economic ideas are not fixed or apolitical.⁴⁶ They are often the product of a political process in which contending professional expertise and political groups battle for influence over economic policymaking.⁴⁷ Indeed, a large body of scholarship finds that macroeconomic policymaking tends to have political origins.⁴⁸ Rather than insulating economic governance from politics, central banks must defend their technocratic reputation and justify their economic policies, particularly following shocks with salient distributional consequences.⁴⁹

Before the 2008 crisis, the Fed's approach to policymaking tended to overweight inflation control relative to full employment,⁵⁰ given Chairman Alan Greenspan's skepticism of both financial regulation and pre-crisis monetary adjustment. During this period known as the *Great Moderation*, politicians had also sought to contain budget deficits through fiscal cuts and reduced

public goods commitments, placing the Fed at the center of economic policymaking.⁵¹

Following the 2008 crisis, the Federal Reserve toggled between both sides of its dual mandate, responding to two different political forces. Facing a lackluster economy that was well below its long-term growth rates,⁵² the Fed first synchronized its accommodative monetary policies with the recession-busting policies of both the George W. Bush and Barack Obama administrations.

After they reached historic levels of crisis spending; however, the Keynesian window quickly closed with the birth of a political movement centered around fiscal consolidation.⁵³ In 2011, the Tea Party⁵⁴ and Congressional Republicans lobbied for legislation to scrap the Fed's dual mandate.⁵⁵ They worried that the central bank's extraordinary crisis actions, including its massive balance sheet expansion, would overheat the economy, spur inflation, and erode the Fed's credibility as an inflation fighter. Fed Chairman Bernanke took the political opportunity to be a technocratic entrepreneur,⁵⁶ announcing the adoption of a 2 percent inflation target in January 2012, the culmination of his decade-long effort to establish a formal numerical inflation anchor.⁵⁷ At the same time, the Obama administration also tried to capitalize on the increased saliency of unemployment in the wake of the crisis. President Obama nominated labor economist and former FOMC vice chair Janet Yellen to replace Bernanke as Fed Chairman in 2014, with the explicit charge of targeting both mandates.⁵⁸ As a Keynesian, Yellen hoped to use monetary policy to mitigate stubbornly high unemployment, which had reached 7 percent by the end of 2013. According to Yellen, the Fed's mandate should “serve all the American people” because “too many Americans can't find a job and worry how they'll pay their bills and provide for their families.”⁵⁹

Balancing these inherent dual mandate tensions became even more complex with the ongoing financialization that followed the 2008 financial crisis. The next section argues that the Fed's growing tendency to use discretionary measures to target credit disruptions complicated its dual mandate by implicitly entrenching a third mandate of financial stability in its monetary operations. When the central bank employs monetary policy to target both financial stability and full employment, it risks making a sustained commitment to easy credit that stokes financial fragility.

2.2. *The return of the Fed's financial stability focus*

The first signs of the implicit financial stability emerged several years before the 2008 global financial crisis, when Fed Chairman Alan Greenspan warned of housing market “froth” during his June 2005 testimony to Congress,⁶⁰ suggesting that financial speculation reflects “an unsustainable underlying pattern.”⁶¹ By mid-2008, almost two-thirds of all U.S. mortgages were securitized, meaning

³⁸ According to this act, the Fed must also report twice a year on its monetary policy to Congress (Goldberg 2013).

³⁹ *The Federal Reserve Board of Governors*. “What are the Federal Reserve's Objectives in Conducting Monetary Policy?” Sept. 26, 2013.

⁴⁰ Moschella 2024.

⁴¹ Kaplan 2018.

⁴² Moschella 2024; Binder and Spindel 2017.

⁴³ Best 2024.

⁴⁴ North 1990.

⁴⁵ Moschella 2024.

⁴⁶ McNamara 2002; Nelson 2014.

⁴⁷ Farrell and Quiggin 2017.

⁴⁸ McNamara 1998; Oatley 1999; Blyth 2002; McNamara 2002; Kirshner 2002; 2003; Nelson 2014; Farrell and Quiggin 2017; Best 2024; Moschella 2024.

⁴⁹ Jones and Matthijs 2019; Moschella 2024.

⁵⁰ Kaya et al. 2019.

⁵¹ McNamara 2002; Blyth 2002; Blyth and Matthijs 2017.

⁵² Real GDP growth averaged 2.2 percent between 2010 and 2015.

⁵³ Farrell and Quiggin 2017.

⁵⁴ The Tea Party was a fiscally conservative movement within the Republican Party that advocated for tax and spending cuts as a vehicle for controlling deficits, debt, and inflation.

⁵⁵ Goldberg 2013.

⁵⁶ Kaya 2022.

⁵⁷ Binder and Spindel 2017, Chapter 7.

⁵⁸ “Obama Explains What He Wants in Next Federal Reserve Chairman.” *L.A. Times* July 29.

⁵⁹ Quote in Goldberg 2013.

⁶⁰ Chairman Alan Greenspan Testimony, *U.S. Congress Joint Economic Committee*, June 9, 2005.

⁶¹ Greenspan is Concerned about “Froth” in Housing, *New York Times*, May 21, 2005.

their income streams were pooled together to form mortgage-backed securities. Theoretically, these securities helped manage market risk by allocating credit into different tranches,⁶² but they were also notoriously difficult to value, sowing the seeds of crisis.

Securitization had profoundly changed the economy by removing the lines of communication between borrowers and the original lender.⁶³ Landmark legislation, the 1999 *Financial Services Modernization Act*, eliminated the regulatory firewall between commercial and investment banking by repealing the 1933 *Glass-Steagall Act*. Designed in the aftermath of the Great Depression, the Glass-Steagall Act sought to disincentivize commercial banks from speculative risk-taking that catalyzed the 1929 U.S. stock market crash. With the passage of the 1999 Financial Services Modernization Act; however, commercial banks re-entered the investment banking business. Commercial banks became increasingly intertwined with investment banks' financial engineering. Traditionally, commercial banks had engaged in straightforward forms of leverage, financing their loan assets with deposited funds. With the advent of financial engineering, however, commercial banks leveraged their original underlying loan assets to help create new financial instruments. They sold their loans to investment banks, who pooled and repacked these case flows into new "derivative assets" (e.g., asset-backed securities and collateralized loan obligations). Treated as off-balance sheet assets by regulators, a growing portion of financial intermediation became less subject to regulation, creating hidden and sustained systemic risk.

After this structural transformation, large financial investors and their investment bank intermediaries had little stake in borrower solvency. These bankers exited their lending relationships when the real estate collateral underlying these securitized assets lost value before the 2008 global financial crisis. Former Congressman Bernie Frank, who was the House Financial Services Committee chairman at the time, discusses the pronounced differences between securitization and direct bank lending.

"Thirty years ago, if you got a mortgage, you went to the bank and that bank frisked you pretty good before giving you the money because the bank expected you to pay the bank back. And then we came up with one of these great financial innovations called securitization, which does do a lot of good. Under securitization, a mortgage lender lends money to a lot of people and does not expect to be repaid by them but bundles up the right to be repaid by them and sells it to a lot of other people. We forgot one simple thing: most people are more careful with their own money than they are with other people's money."⁶⁴

Policy makers were aware of these financial vulnerabilities, as embodied by Greenspan's 2005 "froth" speech, but they also tended to emphasize the benefits of financial innovation. For example, during that same year, Greenspan also noted that "increasingly complex financial instruments have contributed to the development of a far more flexible, efficient, and hence, resilient financial system than the one that existed just a quarter-century ago."⁶⁵

Yet, the tension in Greenspan's views also reflected an emerging policymaking incoherence⁶⁶ within U.S. financial governance. On the one hand, Chairman Greenspan and other economic officials adhered to the idea of market efficiency, where investors' rational expectations converged toward stable, self-correcting market equilibria⁶⁷ and reliable asset prices.⁶⁸ On the other hand, these same officials also expressed uncertainty about the extent of market risk and asset price stability. For example, FOMC board members registered a pronounced shift in how they characterized market fundamentals in their monetary policy minutes. Between 2005 and 2007, the FOMC shifted away from a "balance of risks" terminology, and toward new language referencing "uncertainty" in a textual crescendo in 2007 that surpassed 500 individual references.⁶⁹

Why? Securitization had changed the banking business, creating "tail risk"⁷⁰ on financial balance sheets that was increasingly incalculable, making policymakers more attuned to systemic uncertainty; and hence, an implicit financial stability mandate. Central bank officials thus govern the economy, knowing that commercial banks' off-balance sheet leverage perennially threatens to amplify financial shocks. During crises, banks typically deleverage to improve their financial health, but uncertainty about their "hidden leverage" risks stoking asset fire sales that intensify market volatility and financial system instability.

Securitization is part of a broader process of financialization, where financial institutions and elites play an outsize role in policymaking, which further contributed to uncertainty by creating political constraints on tighter financial regulations. Let us examine these political constraints more extensively in the following pages.

2.3. Financialization shifts the politics of the Fed's mandate

Why does the post-crisis Fed lean so heavily on its monetary policy tools to tackle financial stability, rather than deploying its supervisory and regulatory powers? Politics has often helped determine the bounds of the Fed's regulatory policy, limiting its supervisory tools, and forcing it to rely more on monetary policy. The 2008–2009 financial crisis was the catalyst for the Fed's expanded mandate, but the structural shift in the U.S. economy toward financialization over the last few decades helps explain the Fed's evolution toward using monetary policy for both governing the economy and mitigating credit disruptions in the financial sector.

Financialization reflects a process whereby financial services comprise a growing share of national income, and financial markets are increasingly integral to the operation of the economy. For example, the fulcrum of the U.S. economy is the financial sector, which manages more than \$120 trillion in assets and accounts for almost one-tenth of the national GDP.⁷¹ Political economy scholars have referred to this pattern as a "system reset" that replaced public goods provisions and labor market protections with market integration, liberalization, and privatization at the end of the twentieth century.⁷² Economists have independently referred to this

⁶⁶ Grabel (2019, 2022) argues that today's international financial governance is increasingly characterized by incoherence, or "dissensus in the domain of ideas, and inconsistency in the domain of policy."

⁶⁷ See Nelson and Katzenstein 2014.

⁶⁸ See Fama (1970) for a discussion of the "efficient market hypothesis," where asset prices incorporate all available information about investors' future expectations.

⁶⁹ Nelson and Katzenstein 2014.

⁷⁰ Tail risk is the likelihood that an asset price moves more than three standard deviations from its current price.

⁷¹ Bureau of Economic Analysis; Federal Reserve Bank of St. Louis.

⁷² Blyth and Matthijs, 2017; Blyth, 2002.

⁶² Blanchard, Lecture: The Crisis, Basic Mechanisms and Appropriate Policies, *Center for Economic Studies*. 2008

⁶³ Kaplan 2013.

⁶⁴ Congressman Barney Frank Interview, *PBS Frontline*, February 17, 2009.

⁶⁵ Alan Greenspan Remarks at the *National-Italian American Foundation*, October 12, 2005.

structural trend as “secular stagnation,”⁷³ where a powerfully integrated financial system yields a savings glut that outpaces national economic investment. It risks appreciating asset prices that disproportionately benefit capital over labor,⁷⁴ and ultimately fomenting financial bubbles.

Financialization has thus amplified the structural power of finance and exacerbated income inequality, as the gap between capital income and labor income widens over time. Whereas investment in firms, workers, and households would have once been the crux of the twentieth-century banking business, today U.S. banks funnel a mere 15 percent of their financial capital toward business investment.⁷⁵ In line with this trend, banks’ business operations have shifted dramatically from on-balance sheet commercial bank lending to off-balance sheet derivatives trading and securities investment. During the last decade, three-quarters of total new financial funds in the U.S. banking sector were funneled off-balance sheet toward sovereign wealth funds, hedge funds, pension funds, private equity, retail, and institutional investors.⁷⁶ This securitization has left the economy susceptible to shocks that can catalyze vicious cycles of deleveraging and destabilization.⁷⁷

By amplifying the threat of economic volatility, financialization has thus infused an implicit financial stability mandate into Fed policymaking. Financialization has made large banks indispensable to the broader economy and helped embed “a worldview deeply aligned with Wall Street” that prioritized “financial stability above all else,” including “protecting the existing structure of the financial system.”⁷⁸ Facing such political pressures—but with limited regulatory powers to reign in financial excesses—the Fed had to rely on monetary policy tools to tackle financial stability. The challenge, however, is that a third financial stability target complicates the Fed’s dual mandate of full employment and inflation control.⁷⁹ Let us explore the roots of these policy tensions by examining how a revived financial stability mandate opened the door to employing exceptional monetary policy instruments.

2.4. Quantitative easing and the Fed’s financial stability paradox

“The number of achievable policy goals cannot exceed the number of policy instruments.”⁸⁰

– Jan Tinbergen, Nobel-Prize-winning Dutch economist

In the early days of the 2008 crisis, Fed Chairman Ben Bernanke catalyzed political support for injecting public capital into private banks by invoking the looming threat of economic collapse. Without such emergency financial stabilization measures, Bernanke warned that “we won’t have an economy on Monday.”⁸¹ Along with these capital injections, the 2010 Dodd-Frank Act also endowed the Fed with greater supervisory powers, known

as macro-prudential policies (MPP), such as setting system-wide liquidity and capital ratios to ensure financial stability. Financial regulators thus developed the QE strategy to help mitigate destabilizing cycles and credit disruptions in the wake of the 2008 financial crisis. As a discretionary and unconventional policy, QE was meant to temporarily “increase the availability of credit” and “foster improved conditions in financial markets.”⁸²

However, crisis governance became permanent governance, as the Fed boosted its balance sheet and bailouts beyond the apex of the shock, intensifying financialization.⁸³ For example, the Federal Reserve Act allows the Fed to inject liquidity into banks under “unusual and exigent circumstances.”⁸⁴ With little Congressional oversight, however, many of these liquidity facilities that were designed to mitigate systemic risk also allowed many of the largest banks to consolidate and expand their operations during the crisis. Notably, the consolidated assets of the two largest U.S. banks, Bank of America and JP Morgan Chase, grew by 17 and 30 percent between 2007 and 2010,⁸⁵ after those two banks received nearly one-tenth of the Fed’s total liquidity provisions.⁸⁶ Many large U.S. investment banks (e.g., Goldman Sachs, Merrill Lynch) also benefited from the Fed’s emergency loans. As counterparties to failing financial institutions (e.g., American Insurance Group), these investment banks received funds to cover unpaid trading obligations.⁸⁷

Building from these liquidity facilities, the QE strategy was adopted as a permanent instrument in the central bank toolkit. Given its concerns about credit disruptions spilling over to the real economy, the Fed pursued QE measures during four different periods between 2008 and 2022, amplifying the central bank’s balance sheet by a whopping 9 times its 2008 pre-crisis size, eventually reaching a \$9 trillion post-pandemic pinnacle.

These patterns are in line with what scholars have found globally. Moschella (2015) identifies a changing ideological paradigm that compels central banks, including the Swiss National Bank, to place a comparable weight on price and financial stability following the 2008 global financial crisis. Dubbed “technocratic exceptionalism,”⁸⁸ Best (2018) finds that governments granted emergency powers to central banks in the wake of the 2008 crisis that were intended to help stabilize their economies but became steadily ingrained in technocratic practice.

The issue with permanently adopting these monetary policy tools is that they not only blur the contours of the Fed’s dual mandate, but also leave the central bank with the challenge of using a single monetary policy tool to address several conflicting policy goals. Compared to the dual mandate goals of full employment and price stability, financial stability has no single, quantifiable success metric. Financial stability decisions are also often inherently political because they involve bank governance and bankruptcy concerns.⁸⁹ Most developed countries, except for the United States and the United Kingdom, thus prefer to have independent financial supervisory authorities, or at least separated institutionally,

⁷³Summers 2020.

⁷⁴Blyth and Matthijs, 2017; Blyth, 2002.

⁷⁵Jordà, Schularick, and Taylor 2016.

⁷⁶McKinsey & Company, 2023.

⁷⁷The global economy has exhibited similar patterns, with securitization breeding market volatility in emerging market and developing economies (Kaplan 2013) and commodity markets (Goes and Kaplan 2024) that affects the credit capacity of international financial governance institutions (Kaplan and Shim 2024).

⁷⁸Tooze 2018.

⁷⁹See endnote 9.

⁸⁰Tinbergen (1952).

⁸¹Best 2018; PBS Frontline, *Inside the Meltdown*, Episode 4, 2009.

⁸²Federal Reserve Board Press Release, November 25, 2008.

⁸³Tooze 2018.

⁸⁴Ibid.

⁸⁵Calculated from *Federal Reserve Statistical Release*, Large Commercial Banks, accessed June 2025.

⁸⁶Calculated from table, “Backing the Banks: Fed Liquidity Facilities and Their Users,” in Tooze 2018, p. 216.

⁸⁷Tooze 2018.

⁸⁸Best 2018.

⁸⁹Crockett 2010.

from central banks.⁹⁰ Otherwise, unconventional monetary policy measures that target financial stability might yield dual-edged outcomes.

An implicit financial stability mandate risks intensifying information asymmetries between central bank officials and investors, fomenting market misperceptions. For example, as designed, QE strategies might nudge market participants to adjust their economic expectations higher. However, the implicit financial stability target might also stoke market expectations of further financial rescues. For example, during the 1987 stock market crash, the Fed maintained an accommodative monetary policy stance to help mitigate severe credit disruptions and financial dislocations. Popularly known as the “Greenspan put,” investors believed that the Fed’s intervention had created an asset price floor that insured investors against downside risk.⁹¹

There are striking similarities between the “Greenspan put” and Bernanke’s QE, which investors interpreted as buoying equity and U.S. Treasury markets, respectively. The QE was added to the Fed’s anti-recession toolkit to address credit disruptions that had become more frequent at the turn of the century. Fed Chairman Bernanke was most concerned about an economic problem—the threat of a liquidity trap and deflation disrupting the transmission mechanism for monetary policy.⁹² For this reason, QE is aimed at permanently extending liquidity to help resolve the credit crunch and ultimately stimulate the economy. According to Bernanke, QE operates, at least partly by “signaling policymakers’ intentions to keep short rates low for an extended period.”⁹³

By adopting QE into its permanent institutional toolkit; however, Bernanke created a tension between economic stimulus and easy money in an era of securitization. The QE might help stimulate the economy through massive liquidity injections, but surplus liquidity also amplifies financial risk throughout the banking system.

If that is the case, why did the Fed adopt QE as a permanent rather than provisional tool? Initially designed for a traditional twentieth-century banking system, monetary policy had to adapt to twenty-first-century financialization. For the standard transmission mechanism, short-term rate cuts in money markets induce banks to lend to the broader economy. With greater hidden balance sheet risks today, however, crises may quickly magnify credit disruptions and impede the transmission mechanism’s normal operation. How?

Deteriorating credit conditions prompt financial institutions to leave excess cash in the banking system rather than the real economy, diluting the effectiveness of interest rate cuts on the broader economy. This phenomenon, known as a *liquidity trap*, often characterized the 2008 financial crisis, when near-zero rates failed to stimulate bank lending due to fears of counterparty defaults. Even when financial markets are functioning normally, persistently low interest rates can create liquidity traps, where excess credit and low investment returns discourage economic activity, further perpetuating deflation.

To overcome these liquidity traps, the QE strategy aims to directly influence long-term interest rates through outright purchases of long-term government securities. These operations can also help quell balance sheet stresses at non-bank institutions by

injecting liquidity in exchange for riskier securities (e.g., mortgage-backed rather than government bonds). Scholars have found empirical support for this strategy; on average, QE tends to guide long-term interest rates lower than conventional monetary measures.⁹⁴

By implicitly targeting financial stability; however, the Fed unintentionally incentivized financial risk-taking. Excessively low rates might help spur economic activity, but they also signal to financial institutions and market participants that cheap capital is available for the foreseeable future, helping underwrite financial risks and creating a moral hazard problem. Bankers and investors adapt their business models and expectations to the new QE reality, which risks fostering market perceptions of an implicit interest rate ceiling. In other words, if central banks tend to respond to crises by “do[ing] whatever is necessary,”⁹⁵ they are effectively signaling there is a “non-zero probability” of future bailouts. Why wouldn’t banks grow their balance sheet risk today, knowing that the Fed will likely provide a bailout tomorrow?

2.5. The political impediments to greater financial regulation

In light of the sustained concerns about credit disruptions beyond the 2008 crisis, why didn’t the Federal Reserve rely more on its supervisory powers to address financial stability? Several important political factors constrained the extent of prudential regulations, including the atomized nature of banking supervision, political appointments, and bipartisan support for deregulation.

The Fed shares financial responsibility with other regulators, leaving the institution with greater ambiguity in its financial stability mandate than in its other mandates. The Fed divides its supervisory functions with the U.S. Treasury’s Office of the Comptroller of the Currency (OCC), the Financial Stability Oversight Council (FSOC), and the Federal Deposit Insurance Corporation (FDIC). The Fed and OCC are responsible for regulating many of the nation’s largest banks, but the FDIC also supervises state-chartered and regional banks that are not part of the Federal Reserve System. The FSOC, established by the Dodd-Frank Act, also shares a financial stability mandate. Chaired by the Secretary of the Treasury, the FSOC monitors U.S. financial system risks.

Beyond its legal mandate, the Fed also met considerable political constraints to asserting more regulatory power, in part because of the structural power of finance. President Obama once quipped that the “Fed was above politics,”⁹⁶ and yet Fed officials often operate in a technocratic framework that prioritizes financial markets.⁹⁷ The financial sector, which accounts for more than one-tenth of U.S. GDP, also yields considerable political sway over the Republican and Democratic parties, influencing both President Donald Trump’s 2017 appointment of a new top banking regulator and a 2018 bipartisan Congressional legislation that favored deregulation. These trends are in line with a recent scholarship that finds governments often dilute financial regulations for political benefits.⁹⁸

In 2017, Congress approved Trump’s selection of Randal Quarles as the Vice Chair for Supervision at the Federal Reserve Board of Governors, representing a distinct ideological shift away from the previous Fed supervisory chief, Daniel K. Tarullo. Tasked

⁹⁰Bank for International Settlements 2011.

⁹¹Miller, Weller, and Zhang 2002.

⁹²Bernanke 2015.

⁹³Bernanke 2015.

⁹⁴Toloui 2020.

⁹⁵Bernanke as quoted in Roberts 2020.

⁹⁶Conti-Brown 2016, Chapter 1

⁹⁷Tooze 2018.

⁹⁸Aklin and Kern 2021.

with financial sector oversight, Quarles was appointed by Trump to help lead his administration's financial deregulation efforts. As a former Undersecretary of Finance during the Bush administration and a partner at the Carlyle Group—the world's largest equity firm, Quarles had a light-touch regulatory approach.

By contrast, Tarullo had been appointed by President Obama in the wake of the 2008 financial crisis and led the Board's financial regulatory reforms, including implementing the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act. When announcing the appointment, President Obama had called for a "twenty-first century regulatory framework to ensure that crisis like this can never happen again." To help prevent future financial shocks, the Dodd-Frank Act introduced the Volcker Rule, which sought to manage financial risk by diluting banks' investment ties to private equity and hedge funds. The Dodd-Frank Act also subjected banks with over \$50 billion in assets to greater regulatory oversight, including financial stress tests and new balance sheet rules designed to enhance liquidity provisions and capital cushions.

In line with the executive branch's shift toward greater deregulation in the mid-2010s; however, the U.S. Congress passed the 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act. It effectively represented a regulatory reversal of the 2010 Dodd-Frank Act, particularly for mid-sized and regional banks. By raising the tier for tighter bank regulations from \$50 billion to \$250 billion in assets, this bipartisan legislation, supported by Republicans and the Democratic Party's Wall Street wing,⁹⁹ was billed as efficiency-oriented reform.

The Federal Reserve acknowledged an important tension, however. On the one hand, the 2018 reform ensured that regulations on banks, with less than \$100 billion in assets, "more closely match(ed) their risk profiles."¹⁰⁰ On the other hand, by reducing "compliance requirements for firms with less risk," it lowered their capital and liquidity provisions,¹⁰¹ which meant that mid-sized banks would be more exposed to future crises. According to Senator Elizabeth Warren, "Washington {was} about to make it easier for the banks to run up risk, make it easier to put our constituents at risk, make it easier to put American families in danger."¹⁰² Of course, Senator Warren's remarks proved to be prescient, as the 2018 regulatory rollback set the stage for the massive expansion of regional bank balance sheets in the prelude to the 2023 banking crisis.

3. Empirical analysis: plausibility probe of the 2023 U.S. Regional banking crisis

In the following pages, I conduct a plausibility probe of the theoretical priors of the *financial stability paradox*, using the case of the 2023 regional banking crises, where multiple high-profile financial institutions collapsed, including Silicon Valley Bank (SVB), Signature Bank of New York, and First Republic Bank. The 2023 crisis is a fitting case to test the main argument because it reflects two essential scope conditions for the study: high financialization and deregulation. Prior to this crisis, the Fed's institutional mandate had been transformed with greater financialization of the economy and political constraints on regulation. It had become more reliant

on its monetary policy to address credit disruptions and financial instability, which ironically have fostered greater financial fragility.

Notably, a similar pattern appeared in another global financial hub across the Atlantic that was also characterized by financialization and deregulation. Like the United States, the United Kingdom also has extensive regulations for the largest, most financially complex banks under its 2019 Resolvability Assessment Framework. However, many smaller UK banks fall out of its scope, including the UK subsidiary of Silicon Valley Bank (SVBUK), which failed along with its U.S.-based parent company in March 2023. While beyond the domain of the current U.S. study, the Bank of England recognized the challenge of its regulatory gap after selling SVBUK to HSBC under a resolution process. "The failure of SVBUK highlighted the need to have more options in the event that some smaller UK banks ... end up presenting a bigger risk to our resolution objectives at the point of failure."¹⁰³

Returning to the United States, the Federal Reserve—with its implicit financial stability mandate—had hoped to meet three objectives with a single monetary policy tool: stabilizing the financial system, reviving the economy, and providing price stability. Politically constrained from using its regulatory power to reign in financial sector excesses, the Fed aimed to employ its monetary policy tools to affect broad credit conditions. Fretting that tighter credit conditions might disrupt the financial sector and derail the economic recovery, the Fed maintained its unconventional QE policies throughout much of the first half of 2022.

Despite its aim of mitigating credit crises, the central bank's sustained QE commitment paradoxically fostered market expectations of an interest rate ceiling that cultivated an environment of easy money and asset bubbles. When the central bank eventually began countering rising prices with an aggressive tightening cycle, the Fed faced a financialized economy that was unprepared for higher interest rates, sowing the seeds for the 2023 regional banking crisis.

3.1. Financial stability in the time of the pandemic

To better understand these dynamics, let us first examine the FOMC's meeting minutes and policy statements. In March 2020, the Fed relaunched its QE program for the fourth time since the 2008-09 global financial crisis. Notwithstanding its intention to quickly unwind these unconventionally large bond purchases, the Fed maintained the QE4 program for two-and-a-half years because new COVID-19 variants had raised concerns about the soundness of the banking sector.

In both its January 2021 and January 2022 FOMC statements, the Fed underscored the importance of using QE to preserve financial stability with the same core language in its policy statement. "Asset purchases help foster smooth market functioning and accommodative financial conditions, thereby supporting the flow of credit to households and businesses."¹⁰⁴ In line with this goal, the Federal Reserve maintained QE4, continuing to expand its balance sheet through March 2022. Financial stability remained pivotal to the central bank's policy goals, with Charmain Powell stating that it was "deploying its lending powers to an unprecedented extent" to stabilize credit conditions.¹⁰⁵

⁹⁹Ten Democratic senators were co-sponsors on this regulatory relief bill.

¹⁰⁰"Federal Reserve Board finalizes rules that tailor its regulations for domestic and foreign banks to more closely match their risk profiles," *Federal Reserve Board of Governors*, October 10, 2019.

¹⁰¹Ibid.

¹⁰²Senator Elizabeth Warren Warns Against Dodd-Frank Regulations Rollback, *C-Span2*, March 7, 2018.

¹⁰³Smith, R. "Planning to Fail: What Resolution Is and Why it Matters: Creating a Resolution Regime for the UK's Global Financial System," *Bank of England*, January 9, 2026.

¹⁰⁴FOMC Meeting Statements: January 27, 2021; January 26, 2022.

¹⁰⁵Transcript of Chairman Powell's Press Conference, April 29, 2020; <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20200429.pdf>

As discussed earlier, the sustained QE commitment created a financial stability paradox, helping stabilize short-term credit conditions and the economy today, but at the risk of longer-term financial fragility. By creating expectations of an interest rate ceiling, the QE program incentivized financial risk-taking. Similar to the 1980's "Greenspan Put," the low-interest rate environment encouraged financial business models built on easy credit that fomented asset bubbles and systemic risk. Regional banks were thus ill-prepared for the higher rate environment and unwinding of the QE program in mid-2022. Why?

The Fed had shifted its monetary policy stance from accommodative to aggressive tightening, after stubborn inflation reached its highest level since the 1980s. The Fed had initially deemed that emerging price pressures were transitory, reflecting persistent supply chain shortages due to the pandemic. Facing a liquidity trap with a dearth of new bank lending, the Fed was initially more concerned about financial stability than inflation risk. While some economists have found that QE can be more inflationary than conventional monetary policies,¹⁰⁶ the Fed's balance of risks was oriented toward overcoming the liquidity trap. In its policy minutes, the Fed remained focused on stabilizing credit disruptions,¹⁰⁷ which it feared could impair an economic recovery. To allow for more accommodative monetary conditions under its inflation targeting system, the Fed formalized its FAIT regime,¹⁰⁸ tolerating a breach of its 2 percent average inflation target in 2021. By May 2022, however, Fed Chairman Powell declared that inflation "was much too high and we understand the hardship it is causing... we're strongly committed to restoring price stability."¹⁰⁹ With inflation hovering above 8 percent through the first five months of 2022, economic officials admitted that they were too slow to shift to a tightening cycle. U.S. Treasury Secretary Yellen referred to her 2021 'transitory inflation' remarks, saying "I think I was wrong then about the path that inflation would take."¹¹⁰

By the time the Fed had shifted its policy stance toward monetary tightening, inflation had become ensconced in the economy, reaching its highest levels since the 1980s. Sustained supply chain shortages and commodity price shocks, which began in 2021 and proved more resilient than anticipated, were most likely the central drivers of inflation.¹¹¹

According to the Fed's *Statement on Longer-Run Goals and Monetary Policy Strategy*, the central bank typically sees the two sides of its dual mandate as synergistic: providing monetary and price stability helps ensure long-term growth and full employment.

"The Committee's employment and inflation objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it takes into account the employment shortfalls and inflation deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate."¹¹²

¹⁰⁶ A meta-analysis of 82 econometric studies in the euro area, the United Kingdom, and the United States found a robust inflationary effect of quantitative easing (see Wieladek 2024).

¹⁰⁷ Chairman Powell's Press Conference, April 29, 2020.

¹⁰⁸ See endnote 15.

¹⁰⁹ "Fed raises rates by half a percentage point—biggest hike in two decades—to fight inflation." *CNBC*, May 4, 2022.

¹¹⁰ "Yellen says administration was fighting inflation, admits she was wrong that it's transitory." *CNBC*, June 2, 2022.

¹¹¹ Bernanke and Blanchard 2023.

¹¹² See endnote 13.

However, by mid-2022, when it was clear inflation was not transitory, price stability became the Fed's primary objective, warranting a shift to a restrictive monetary policy posture. As summarized by Fed Governor Lisa Cook at a March 2024 speech at Harvard University.

"In 2022 and into 2023, with unemployment near historical lows but inflation at its highest levels in four decades, it was clear that this approach to meeting the dual mandate implied forceful tightening of monetary policy."¹¹³

Counterfactually, the lack of political support for financial regulation meant the Fed was stuck relying on unconventional monetary policy instruments, which complicated its dual mandate. If the Fed had fewer political constraints on its regulatory powers, it could have provided financial stability in other ways beyond QE. The Fed would have had more scope to shift to a tightening cycle earlier, helping guide long-term interest rates higher.¹¹⁴

Importantly, by making its unconventional balance sheet expansion conventional, the Fed stoked market expectations that further financial turmoil would beget further financial rescues. Of course, any crisis tends to have multiple potential causes, but political constraints to greater regulatory supervision likely contributed to the Fed's overreliance on QE to mitigate credit disruptions. Indeed, fragmented banking supervision, and bipartisan support for deregulation meant the Fed had fewer tools to ensure the banking sector's soundness, making the central bank more reliant on easy credit.

The key challenge for QE was timing its reversal. The Fed waited until June 2022 to unwind its unconventional bond purchases. At that point, the Fed not only started reducing its bond holdings (by \$95 billion per month) but also tightened monetary policy at a pace not seen since the 1980s, hiking interest rates by more than 3.5 percentage points by the end of 2022.

Compared to the fluidity of open market operations, unwinding the Fed's balance sheet involves careful planning to sell long-term securities in a predictable and measured manner over months. Throughout the time of the Fed's decade-long balance sheet expansion, banks were holding about three-quarters of the Fed's new asset accumulation as excess reserves to help mitigate credit risk.¹¹⁵ In expectation of a pandemic recovery, however, banks reduced their excess reserves by one-seventh during the first third of 2022,¹¹⁶ which helped fuel a money supply expansion and inflation. Pandemic-driven supply chain shortages, sustained commodity shocks after Russia's Ukraine invasion, and tight labor markets also contributed to stubbornly high inflation.¹¹⁷ Lingering price pressures upended long-term planning for an incremental QE reversal and a steady credit tightening, with rapid interest rate hikes instead cultivating the conditions for the 2023 regional banking crisis.

3.2. The moral hazard of targeting financial stability with monetary policy

By 2023, the stage was set for a regional banking crisis of national proportions that included the second- and third-largest bank failures in U.S. history. Catalyzed by SVB's collapse in early March, a

¹¹³ See endnote 14.

¹¹⁴ See Toloui 2020.

¹¹⁵ Cline 2015.

¹¹⁶ Total Reserves of Depository Institutions, Board of Governors of the Federal Reserve System, October 22, 2024.

¹¹⁷ Bernanke and Blanchard 2023.

wave of financial contagion rippled throughout both coasts, culminating in the failures of both New York's Signature Bank and San Francisco-based First Republic Bank. While they were theoretically regional banks, their whopping balance sheet expansion following 2018's regulatory reforms had converted them into systematically important financial institutions.

After the Trump administration reversed the Dodd-Frank Act's regulatory reforms, regional banks were allowed to circumvent stress tests and financial regulations, with a new regulatory ceiling moving from \$50 to \$250 billion. Ironically, after this new regulation had deemed these regional banks as systematically *unimportant*, the balance sheets of Signature Bank, SVB, and First Republic Bank surged more than 10 times their post-2008 financial crisis size, reaching a whopping \$110.3, \$209.0, and \$212.6 billion by the end of 2022.

The blame for these regional bank collapses partly reflects balance sheet mismanagement, but as outlined by our earlier logic, QE—which lasted for almost two-and-a-half years—also played a pivotal role by fanning expectations of easy credit. Counterfactually, financial authorities would have likely checked this massive balance sheet expansion if financial regulations had not been diluted in 2018, and financial supervision had a more central role in regulating banks.

As discussed earlier, however, there were considerable political constraints to greater financial regulation, both technocratically and legislatively. With the Fed's new supervisory chair and a bilateral congressional coalition in favor of deregulation, the Fed was left trying to provide financial stability through its monetary policy. The Fed also has supervisory powers, but they were diluted by the Fed's shared responsibility across several different government agencies (e.g., U.S. Treasury and the FDIC), and most importantly, tempered for mid-sized banks by the 2018 regulatory rollback. Without sufficient bank supervision, mid-sized banks strongly grew their balance sheets until they ironically represented systemic risk levels.

At the same time, the Fed's concerns about financial stability—highlighted in FOMC minutes in early 2022—contributed to its enduring commitment to its QE program. With banks holding three-quarters of the Fed's balance sheet expansion on their balance sheets, QE was not too inflationary for the first two years of the pandemic. However, by early 2022, banks had begun decreasing their excess reserves and lending more broadly to the economy. The liquidity trap thus appeared to wane, yet the Fed's financial stability concerns kept it from moving more quickly to tighten credit conditions. Reversing QE was also an incremental process that was more akin to turning a freighter than a speedboat in rocky waters. By mid-2022, the Fed's prolonged financial stability focus and lagged inflation response meant it had to hike interest rates aggressively to maintain price stability.

Let us first examine the catalyst for the crisis, SVB's collapse, before briefly exploring financial contagion. Given its location in the nation's technological heartland, SVB had specialized in the financing of start-up firms with access to venture capital (e.g., Etsy, Fitbit, Pinterest, and Vox Media). In 2010, SVB had a balance sheet that at \$16.3 billion was comparable to other regional banks, such as the Bank of Oklahoma and First Hawaiian Bank. Even at the time of the 2018 regulatory reforms, SVB had \$50.3 billion in assets, just over the regulatory threshold. With the 2018 reforms pushing the threshold above \$250 billion, SVB could grow its balance sheet unimpeded by regulation to become the sixteenth largest bank in America. For example, its deposits spiked by 220 percent

in the aftermath of the pandemic, compared to a modest average expansion of 26 percent at FDIC-insured banking institutions.

To match this deposit liability growth, SVB had also grown its financial assets by investing in relatively safe long-term bonds, but its investment model was exposed to significant downside risk. The Fed's QE during the pandemic had sent a signal to less-savvy financial investors like SVB that there was a near-term price floor on government bonds, which accounted for a large share of its investment portfolio. SVB had invested more than \$90 billion in long-term Treasury bonds. In anticipation that government bond prices would remain high against the Fed's unprecedented balance sheet expansion, SVB fueled its deposit growth by offering its technology clients higher corporate deposit rates. SVB also financed its deposits by recycling venture capital funds. After lending venture capital to technology firms, those firms would deposit funds at SVB after their Initial Public Offering (IPO), or first stock issuance.

The problem with both financing strategies is that they relied upon a low-interest-rate environment. SVB had bet that interest rates would remain low, given the Fed's unconventional QE measures. When interest rates moved quickly higher amid the Fed's sudden shift to a tightening cycle in the summer of 2022, long-term bond prices fell, which undercut these investments. By March 2023, these bad investments had yielded \$1.8 billion in after-tax losses, submerging its share price and inducing depositor withdrawals. At the same time, IPOs fell by about two-fifths in 2022, which led Bay area entrepreneurs to withdraw more deposits—many of which were not covered by the \$250,000 FDIC insurance cap. The bank could not provide depositors with their funds, creating a credit crunch in the technology sector.

SVB was caught in a vicious cycle of depositor withdrawals and falling bond prices, leaving it on the brink of insolvency and sparking financial volatility at other large regional banks. Signature Bank—based in New York—was one of the few banks that had welcomed cryptocurrency deposits, and similarly to SVB, most of these deposits exceeded the \$250,000 FDIC-federal insurance ceiling. Investors fretted a deposit run, particularly in an industry that had recently witnessed the collapse of FTX cryptocurrency exchange in the fall of 2022. Regional banks had tumbled in March 2023 by nearly one-third, according to the *S&P Regional Bank Select Industry Index*.

On March 12, the Federal Reserve, U.S. Treasury, and FDIC thus enacted the rare measure of guaranteeing all of Signature and SVB's deposits, saying they posed a major risk to the economy. By early May, First Republic Bank, a third bank that solicited lofty, uninsured deposits from wealthy firms and individuals, was also teetering on the verge of insolvency because of its vast deposit runs. Regulators took possession of the failed bank, with J.P. Morgan Chase acquiring First Republic's distressed deposits and assets through a federal auction.

These unprecedented actions underscore how the Fed's institutional mandate has increasingly incorporated an implicit third financial stability target. Why? Financial complexities have contributed to growing credit disruptions over time, prompting the Fed to add unconventional monetary policies, including QE, to its anti-recession policy mix. In such a financialized environment, the Federal Reserve has often aimed to keep interest rates low to create societal expectations of a financial and economic recovery. The risk, however, is that these unconventional policies also foster expectations of an interest rate ceiling by financial market participants, where easy money threatens to sow the seeds of future crises. A political consensus favoring deregulation since the

2018 regulatory rollback has further limited the Fed's ability to use supervisory powers to forestall financial crises.

4. Concluding discussion

In summary, this article developed a new theory about monetary policymaking dubbed the *financial stability paradox*. By stretching its monetary policy operations to achieve three concurrent goals, the Fed's implicit financial stability target complicated its ability to meet its dual mandate of full employment and price stability by inadvertently intensifying financial fragility.

The twenty-first-century securitization of the American economy left it susceptible to systemic financial volatility, leading to the development of new monetary policy instruments. First deployed during the 2008 global financial crisis, central bank officials had hoped that QE—or massive central bank balance sheet expansion—could simultaneously diminish widespread credit disruptions and revitalize the distressed economy. After the onset of the 2020 pandemic, the QE strategy was again employed to battle deflation and to stabilize a financially frazzled banking sector.

The plausibility probe of the 2023 U.S. regional banking crisis demonstrates these governance challenges. The Federal Reserve was placed in the unenviable position of employing one tool—interest rates—to simultaneously balance full employment, inflation control, and financial stability. In using such a blunt QE monetary policy instrument to target financial stability, the Fed could not swiftly retract its balance sheet, which reinforced expectations of an interest rate ceiling and encouraged financial risk-taking.

Banking supervision and prudential regulations are often better tools for taming financial excesses, but the 1990's deregulation left the Federal Reserve mostly reliant on its monetary policy operations to check financial volatility. Following the 2008 global financial crisis, the Dodd-Frank Act's financial reforms had initially aimed to bring the supervisory apparatus back to financial governance. However, 2018's swift regulatory reversal diluted many of its reform provisions, particularly for mid-sized regional banks that theoretically did not pose systemic risks. Without greater financial supervision and stress tests, regional bank balance sheets grew at a mercurial pace in the 2020s. For example, SVB's balance sheet expanded briskly during these years, evolving from a small, regional bank to a financial powerhouse—whose client list included more than two-fifths of venture capital-backed and publicly-traded technology firms.

Given such systemic risks, the Fed is caught in a financial catch-22 when regularly using unconventional QE policy measures rather than prudential regulation and supervision. The central bank expands its balance sheet to prevent financial volatility and stabilize the economy, only to later foment greater financial disruption when eventually unwinding its balance sheet. Indeed, without exiting from its mandate ambiguity, the Fed has no clear escape from its financial stability paradox in an increasingly financialized world.

This implicit financial stability mandate has complicated the Fed's ability to meet its dual mandate of inflation control and job growth. At times, these goals have been complementary, allowing the central bank to pursue maximum employment, or “highest level of employment that can be achieved on a sustained basis in the context of price stability.”¹¹⁸ In other words, by primarily targeting

price stability, the Fed could also achieve historically low unemployment for much of the last half-century. However, these dual monetary policy objectives have not always been complementary. In the late 1970s and early 1980s, the U.S. economy experienced stagflation, or simultaneously high inflation and high unemployment. To restore price stability, the Fed had to raise interest rates aggressively, which yielded dual recessions and historically high jobless rates.

In today's economy, there is some redux risk against the backdrop of the Iran oil shock and the gradual rollout of Trump's “liberation day” tariffs, or reciprocal tariffs targeting unfair trade practices. With the U.S. facing a renewed threat of price and financial shocks, the Fed's financial stability paradox—a mandate dilemma pitting price stability versus financial stability—could breed a *mandate trilemma*.¹¹⁹ With the prospect of such looming shocks, policymakers might struggle to balance financial stability with not only price stability, but also the Fed's maximum employment mandate. Under these conditions, targeting price stability may not yield full employment. Operating with a single interest rate tool to meet these competing goals may instead leave the economy furloughed, and the Fed walking a monetary policy tightrope without an economic safety net.

Competing interests. The author was a senior economist at the Federal Reserve Bank of New York from 1997 to 2003 but has not worked for the organization for twenty years.

Acknowledgements. The author would like to thank Susan Rose-Ackerman for inspiration, Sarah Binder for invaluable conversations and recommendations, two anonymous reviewers for excellent suggestions, and Alexis Crupi for terrific research assistance.

Bibliography

- Bank for International Settlements.** (2011). “Central Bank Governance and Financial Stability: A Report by a Study Group.” May.
- Alesina, A., and Summers, L.** (1993). “Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence.” *Journal of Money, Credit, and Banking*, 25: 151–62. [10.2307/2077833](https://doi.org/10.2307/2077833)
- Aklin, M. and Kern, A.** (2021). “The Side Effect of Central Bank Independence.” *American Journal of Political Science*. 65(4): 971–987. [10.1111/ajps.12580](https://doi.org/10.1111/ajps.12580)
- Bernanke, B.S.** (2015). *The Courage to Act*. New York: W.W. Norton.
- Bernanke, B.S.** (2020). “Presidential Address on the New Tools of Monetary Policy,” *Remarks at the 2020 American Economic Association (AEA)*, Washington DC: January 4.
- Bernanke, B.S. and Blanchard O.** (2023). “What Caused the U.S. Pandemic Inflation?” *Hutchins Center Working Paper #86*.
- Best, J.** (2018). Technocratic Exceptionalism: Monetary Policy and the Fear of Democracy, *International Political Sociology*, 12(4): 328–345 [10.1093/ips/oly017](https://doi.org/10.1093/ips/oly017)
- Best J.** (2024). Central banks' Knowledge Controversies. *New Political Economy*. 29(6): 857–871. [10.1080/13563467.2024.2359951](https://doi.org/10.1080/13563467.2024.2359951)
- Binder, S. and Spindel, M.** (2017). *The Myth of Independence: How Congress Governs the Federal Reserve*. Princeton, N.J.: Princeton University Press.
- Blyth, M.** (2002). *Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century* (Cambridge: Cambridge University Press).
- Blyth, M. and Matthijs, M.** (2017). “Black Swans, Lame Ducks, and the Mystery of IPE's Missing Macroeconomy.” *Review of International Political Economy*, 24(2): 203–31. [10.1080/09692290.2017.1308417](https://doi.org/10.1080/09692290.2017.1308417)
- Blyth, M.** (2022). “The More Things Change: Banking, Bailouts, and Business as Usual in American Capitalism.” *Journal of International Affairs*: 75(1).

¹¹⁸2026 Statement on Longer-Run Goals and Monetary Policy Strategy, *Board of Governors of the Federal Reserve System*.

¹¹⁹Kaplan (2024); El-Erian (2023); also see Obstfeld (2015) and Schoenmaker (2011) for other financial trilemmas.

- Bodea, C., and Hicks, R.** (2015). Price Stability and Central Bank Independence: Discipline, Credibility, and Democratic Institutions. *International Organization*, 69 (1), 35–61. [10.1017/S0020818314000277](https://doi.org/10.1017/S0020818314000277)
- Bodea, C. and Garriga A.C.** (2022). “Central Bank Independence in Latin America: Politicization and De-delegation.” *Governance*, 36(1): 59–80. [10.1111/gove.12706](https://doi.org/10.1111/gove.12706)
- Broz, L. and Frieden, J.** (2001). The Political Economy of International Monetary Relations. *Annual Review of Political Science*. 4(1): 317–343. [10.1146/annurev.polisci.4.1.317](https://doi.org/10.1146/annurev.polisci.4.1.317)
- Broz, L.** (2002). Political System Transparency and Monetary Commitment Regimes. *International Organization*. 56(4): 861–887. [10.1162/002081802760403801](https://doi.org/10.1162/002081802760403801)
- Cline, W.R.** (2015). “Quantity Theory of Money Redux? Will Inflation be the Legacy of Quantitative Easing?” *National Institute Economic Review*, 234 (November): R15–R26.
- Conti-Brown, P.** (2016). *The Power and Independence of the Federal Reserve*. Princeton University Press.
- Crockett, A.** (2010). “The Future of Central Banking Under Post-Crisis Mandates.” *Ninth BIS Annual Conference*, Monetary and Economics Department, June 24–25.
- Crockett, A.** (2011). “Central bank governance under new mandates,” *BIS Papers No. 55*.
- Dargent Bocanegra, E. and Lotta, G.S.** (2025). “Expert Knowledge in Democracies: Promises, Limits, and Conflict.” *Annual Review of Political Science*. Published online, January 2.
- El-Erian, M.** (2023). “Banking Turmoil Intensifies the Need for Better Federal Reserve Policymaking.” *Financial Times*, March 20th.
- Fama, E.F.** (1970). “Efficient Capital Markets: A Review of Theory and Empirical Work.” *The Journal of Finance*, 25(2): 383–417.
- Farrell, H. and Quiggin.** (2017). “Consensus, Dissensus, and Economic Ideas: Economic Crisis and the Rise and Fall of Keynesianism.” *International Studies Quarterly*, 61(2): 269–283. [10.1093/isq/sqx010](https://doi.org/10.1093/isq/sqx010)
- Friedman M.** (1968). “The Role of Monetary Policy.” *American Economic Review* 58(1): 1–17.
- Friedman, M.** (1970). “A Theoretical Framework for Monetary Analysis.” *The Journal of Political Economy* 78(2): 193–238. [10.1086/259623](https://doi.org/10.1086/259623)
- Garriga, A.G. and Rodriguez, C.M.** (2023). “Central bank independence and inflation volatility in developing countries.” *Economic Analysis and Policy*, 78: 1320–1341. [10.1016/j.eap.2023.05.008](https://doi.org/10.1016/j.eap.2023.05.008)
- Goes, I and Kaplan, S.B.** (2024). “Crude Credit: The Political Economy of Natural Resource Booms and Sovereign Debt Management.” *World Development*. 180: 1–14. [10.1016/j.worlddev.2024.106645](https://doi.org/10.1016/j.worlddev.2024.106645)
- Goldberg, M. A.** (2013). “The Fed’s Dual Mandate: One Too Many.” *Review of Banking and Financial Law*, 33(1), 343–380.
- Golub, S., Kaya, A., and Reay, M.** (2015). What were they thinking? The Federal Reserve in the run-up to the 2008 Financial Crisis. *Review of International Political Economy*, 22(4): 657–692. [10.1080/09692290.2014.932829](https://doi.org/10.1080/09692290.2014.932829)
- Goodhart, L.M.** (2015). Brave New World? Macro-prudential Policy and the New Political Economy of the Federal Reserve. *Review of International Political Economy*, 22(2): 280–310. [10.1080/09692290.2014.915578](https://doi.org/10.1080/09692290.2014.915578)
- Grabel, I.** (2019). *When Things Don’t Fall Apart: Global Financial Governance and Development Finance in an Age of Productive Incoherence*. MIT Press.
- Grabel, I.** (2022). “Post-American Moments in Contemporary Global Financial Governance,” P.J. Katzenstein and J. Kirshner (eds.), *The Downfall of the American Order? Liberalism’s End?* Cornell University Press: pp. 124–43.
- Greider, W.** (1989). *Secrets of the Temple: How the Federal Reserve Runs the Country*. Simon & Schuster.
- Haltam, R. and Weinberg, J.A.** (2017). “Does the Fed Have a Financial Stability Mandate?” *Economic Brief*, No. 17-06, Federal Reserve Bank of Richmond.
- Helleiner, E.** (2019). The Life and Times of Embedded Liberalism: Legacies and Innovations since Bretton Woods. *Review of International Political Economy*, 26(6). [10.1080/09692290.2019.1607767](https://doi.org/10.1080/09692290.2019.1607767)
- Helleiner, E.** (2025). International Finance and the Global Polycrisis. *Finance and Space*. 2(1): 221–236. [10.1080/2833115X.2025.2514272](https://doi.org/10.1080/2833115X.2025.2514272)
- Hopkin, J. and Blyth, M.** (2019). “The Global Economics of European Populism: Growth Regimes and Party System Change in Europe.” *Government and Opposition*, 54(2): 193–225. [10.1017/gov.2018.43](https://doi.org/10.1017/gov.2018.43)
- James, H.** (1996). *International Monetary Cooperation Since Bretton Woods*. Oxford, England: Oxford University Press.
- Jones, E., and Matthijs, M.** (2019). “Rethinking Central-Bank Independence.” *Journal of Democracy*, 30(2): 127–41.
- Jordà, O., M. Schularick, and A.M. Taylor.** (2016). The Great Mortgaging: Housing, Finance, Crises, and Business Cycles. *Economic Policy*, 31(85): 107–152 [10.1093/epolic/eiv017](https://doi.org/10.1093/epolic/eiv017)
- Kaplan, S.B.** (2013). *Globalization and Austerity Politics in Latin America*. New York: Cambridge University Press.
- Kaplan, S.B.** (2018). Fighting Past Economic Wars: Crisis and Austerity in Latin America. *Latin American Research Review*, 53(1): 19–37. [10.25222/larr.292](https://doi.org/10.25222/larr.292)
- Kaplan, S.B.** (2024). “The Mandate Trilemma: Central Banking in an Era of Credit Crises.” In S. Rose-Ackerman (ed.), *Public Sector Performance, Corruption, and State Capture in a Globalized World*, Routledge Research in Public Law.
- Kaplan, S.B. and S. Shim.** (2024). “Global Contagion Risk and IMF Credit Cycles: Emergency Exits and Revolving Doors.” *Regulation and Governance*. 18(3): 851–873.
- Kaya, A., Golub, S., Kuperberg, M., Lin, F.** (2019). “The Federal Reserve’s Dual Mandate and the Inflation-Unemployment Tradeoff.” *Contemporary Economic Policy*, (37)4, 641–651. [10.1111/coep.12422](https://doi.org/10.1111/coep.12422)
- Kaya, A.** (2022). “The Federal Reserve’s Move to an Explicit Inflation Target: Incremental Policy Shifts in Techno-Political Institutions.” *Review of International Political Economy*, 29(5): 1625–1649. [10.1080/09692290.2021.1934073](https://doi.org/10.1080/09692290.2021.1934073)
- Keefer, P. and D. Stasavage.** (2003). “The Limits of Delegation: Veto Players, Central Bank Independence, and the Credibility of Monetary Policy.” *American Political Science Review*. 97(3): 407–423.
- Kirshner, J.** (2002). *Monetary Orders: Ambiguous Economics, Ubiquitous Politics*. Ithaca, NY: Cornell University Press
- Kirshner, J.** (2003). Money Is Politics. *Review of International Political Economy*, 10(4): 645–660 [10.1080/09692290310001601911](https://doi.org/10.1080/09692290310001601911)
- McKinsey & Company** (2023). *The Global Banking Annual Review: The Great Banking Transition*. October 10.
- McNamara, K.R.** (1998). *The Currency of Ideas: Monetary Politics in the European Union*. Cornell University Press.
- McNamara, K.R.** (2002). “Rational Fictions: Central Bank Independence and the Social Logic of Innovation.” *West European Politics*, 25(1): 47–76.
- Meltzer, A.H.** (2009). *A History of the Federal Reserve, Volume 2, Book 2, 1970–1986*. Chicago: University of Chicago Press, 2009.
- Miller, M. H., Weller, P.A. and Zhang, L.** (2002). “Moral Hazard and the U.S. Stock Market: Analyzing the Greenspan Put,” *Economic Journal*. 112: C171–C186. [10.1111/1468-0297.00029](https://doi.org/10.1111/1468-0297.00029)
- Monnet, E.** (2024). *Balance of Power: Central Banks and the Fate of Democracies*. University of Chicago Press.
- Moschella, M.** (2015). Currency Wars in the Advanced World: Resisting Appreciation at a Time of Change in Central Banking Monetary Consensus. *Review of International Political Economy*, 22(1): 134–161. [10.1080/09692290.2013.869242](https://doi.org/10.1080/09692290.2013.869242)
- Moschella, M.** (2024). *Unexpected Revolutionaries: How Central Banks Made and Unmade Economic Orthodoxy*. Cornell Studies in Money. Ithaca, NY: Cornell University Press.
- Nelson, S.C. and Katzenstein, P.J.** (2014). “Uncertainty, Risk, and the Financial Crisis of 2008.” *International Organization*, 68: 361–392.
- Nelson, S.C.** (2014). “Playing Favorites: How Shared Beliefs Shape the IMF’s Lending Decisions.” *International Organization* 68(2): 297–328. [10.1017/S0020818313000477](https://doi.org/10.1017/S0020818313000477)
- Nixon, R.M.** (1962). *Six Crises*. Garden City: Doubleday & Company.
- North, D.C.** (1990). *Institutions, Institutional Change, and Economic Performance*. New York, NY: Cambridge University Press.
- Oatley, T.** (1999). Central Bank Independence and Inflation: Corporatism, Partisanship, and Alternative Indices of Central Bank Independence. *Public Choice* 98: 399–413. [10.1023/A:1018309521386](https://doi.org/10.1023/A:1018309521386)
- Obstfeld, M.** (2015). “Trilemmas and Trade-offs: Living with Financial Globalization.” *BIS Working Papers* 480: 1–63.

- Roberts, A.S.** (2020). "The Pandemic Exposes an Ailing US Governance Mode." *Current History*, November: 310–316.
- Schoenmaker D.** (2011). "The Financial Trilemma." *Economic Letters* 111(1): 57–59. [10.1016/j.econlet.2011.01.010](https://doi.org/10.1016/j.econlet.2011.01.010)
- Stiglitz, J. E.** (2009). "The Anatomy of a Murder: Who Killed the Economy?" *Critical Review* 21(2-3). [10.1080/08913810902934133](https://doi.org/10.1080/08913810902934133)
- Summers, L.** (2020). Accepting the Reality of Secular Stagnation. *Finance and Development Magazine*. Washington DC: IMF.
- Taylor, J.B.** (2011). "End the Fed's Dual Mandate and Focus on Prices," *Bloomberg*, September 16th.
- Tinbergen, J.** (1952). *On the Theory of Economic Policy*. Second edition. Amsterdam, Holland.
- Toloui, R.** (2020). "How do the Federal Reserve's New Tools Really Work?" *Policy Brief*, Stanford Institute for Economic Policy Research (SIEPR).
- Tooze, A.** (2018). *Crashed: How a Decade of Financial Crises Changed the World*. Penguin Books.
- Weiladek, T.** (2024). "Quantitative Easing Generates More Inflation than Conventional Monetary Policy." *Center for Economic Policy Research (CEPR)*, January 3.
- Wieladek, T.** (2024). "Does QE Have a Stronger Inflation Effect than Conventional Monetary Policy?" *Macprudential Matters: Critical Analysis of Macprudential and Financial Stability Policy in the UK and Globally*. Qatar Centre for Global Banking and Finance at King's Business School. February 21st.