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DISORDERLY MARKETS: THE FEDERAL RESERVE, THE BANKING LOBBY, AND THE GOVERNMENT SECURITIES MARKET, 1920-1961

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Table of Contents

INTRODUCTION 1

Liquidity Support or Debt Monetization? 3

The Working Fictions of a Fiat Money Regime 11

Modern Money as a Site of Boundary Struggles 20

Organization and Plan 28

1. THE REAL BILLS DOCTRINE AND THE AGRARIAN CONCEPT OF ORDERLY MARKETING IN THE 1920-21 DEPRESSION 36

Commerce and Speculation in the Real Bills Doctrine 36

Orderly Marketing 39

The 1920-21 Depression 42

2. FROM ORDERLY MARKETING TO ORDERLY BOND MARKETS: THE RISE OF OPEN MARKET OPERATIONS 50

Historical Origins of Open Market Operations 53

The Great Depression and the Fight Against Greenbacks 59

The Banking Act of 1935 66

"Orderly" vs. "Pegged" Markets: The Vagaries of Liquidity Provision 69

Politicizing Market Order: The Bond Market Panics of 1937 and 1939 76

3. PEGGED MARKETS: THE FED DURING WARTIME 101

Boundary Struggles in the Prelude to War: The 1940 Special Report to Congress 105

Pearl Harbor and the Road to the Peg 111

The Second War Powers Act 118

Private Monetization: Excess Reserves and War Loan Deposit Accounts 120

The October 1942 Treasury Issue 124

Greenback Panic: The Federal Reserve Bank Note Issue of 1943 128

The Federal Reserve's Role in Japanese Internment 132

Liquidity Politics: Debates over the Composition and Distribution of the War Debt 134

Austerity or Public Money? Wright Patman vs. Marriner Eccles on Private Monetization 141

Bankers' Melancholy 157

4. STAGGERING TOWARD LIBERALIZATION: THE POSTWAR PROJECT OF ORDERLY RECONVERSION 161

Orderly Labor Markets: The Employment Bill of 1945 164

Orderly Foreign Exchange Markets: Bankers' Opposition to Bretton Woods 174
Orderly Consumer Markets: The Politics of Price Controls 179
Orderly Government Securities Markets: Eccles' Secondary Reserve Plan 186
Why Did Bankers Oppose the Eccles Plan? 196
The Afterlife of the Eccles Plan 202
5. LEAVING THE PEG: THE COLD WAR AND THE ROAD TO THE TREASURY-FEDERAL RESERVE ACCORD OF 1951 207
The Marshall Plan, the 1948 Election, and Bankers' Evolving Attitudes on the Peg 210
A False Start: The 1949 Recession 218
The Douglas Committee Hearings 228
Escalating Tensions Between the Federal Reserve and the Treasury, 1950-51 239
Reaching Accord 257
Appraising the Accord 262
6. A RETURN TO "FREE MARKETS": WILLIAM MCCHESNEY MARTIN JR. AND THE BILLS ONLY POLICY 266
The Fed, Rudderless 269
The Patman Inquiry 274
Martin's Ad Hoc Subcommittee 285
Sproul's Response to the Ad Hoc Subcommittee Report 291
Performing Free Markets: Martin's "Transition to Free Markets" Speech 293
Eisenhower, Humphrey, and the 30-Year Bond Issue of 1953 296
"A Re-education in the Market Concept" 314
New Market Techniques: Dealer Repo, "Even Keel" Policy, and TT&L Accounts 316
The Rise of Dealer Repo 318
Cleaning up "Sloppy" Markets: Dealer Repo in the 1953-54 Recession 326
The Fed, in Absentia: Instituting the "Even Keel" Policy 329
"Dynamic" Open Market Operations, "Defensive" Repo 335
Treasury Tax and Loan (TT&L) Accounts 342
The Legacy of the Accord: Monetary Restraint, Fiscal Restraint, and Liquidity Support 350
7. CONCLUSION 355
REFERENCES 365

List of Figures

Figure 1: Growth of Open Market Operations and Expansion of the Federal Debt, 1920-1962 58
Figure 2: Ownership of the Federal Debt by Investor Class, 1940-1945 154
Figure 3: Federal Budget Balance and Consumer Price Index, 1947-1952.....243
Figure 4: Private Loans vs. Government Security Holdings in U.S. Commercial Banks, 1948-1961 301
Figure 5: Government Securities Held Under Repurchase Agreement by the Federal Reserve System, 1948-1960.....321
Figure 6: Treasury Cash Management, 1935-1960.....345
Figure 7: Gross Receipts in Treasury Accounts at Special Depositaries, 1948-1960 346

Abstract

Disorderly Markets: The Federal Reserve, the Banking Lobby,

and the Government Securities Market, 1920-1961

Aaron C. Wistar

This dissertation examines the historical roots of Federal Reserve liquidity support policies in the market for U.S. Government securities during the early years of the central bank's existence, 1920-1961. Drawing on the Federal Reserve System's archival records, records of congressional hearings, and historical news coverage, I trace a genealogy of the Federal Reserve's informal mandate to maintain "orderly" conditions in the government securities market. The animating idea behind the maintenance of orderly markets was that the ostensibly self-regulating price mechanism of a "free" government securities market could only be guaranteed through Federal Reserve interventions that would stave off speculative panic and the threat of illiquidity. In other words, the free market could be established and maintained only through continuous intervention. I analyze how the influence of private bankers in the Federal Reserve System helped to ensure that the malleable discourse of orderly markets would be employed to legitimate interventions that benefited the U.S. financial sector. At the same time, it preserved the idea of bond markets as a site of truth, in which the impersonal economic logic of supply and demand—and not the political logic of price support—could be brought to bear on the fiscal state.

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INTRODUCTION

"This is supposed to be the deepest market in the world, and liquidity has just disappeared."[1]

- Dickie Hodges, bond fund manager at Nomura Asset Management, March 13, 2020

In March 2020, days after the World Health Organization declared COVID-19 a pandemic, the market for United States Treasury Bonds disintegrated. Yields, which had been climbing steadily as news of the disease spread, dramatically spiked. Panic ensued as banks and dealers refused to put a floor under the falling market by tendering bids. Investors said that trading had become disorderly: Market liquidity had evaporated, and the price mechanism could no longer function. Treasury securities, widely considered to be world's safest asset, could not be reliably priced.

The Federal Reserve swept into action on March 16. In the following three weeks, it would purchase $1 trillion of Treasury securities outright, and would continue to make purchases of at least $80 billion per month into 2021. In addition to outright purchases, the Fed supported market liquidity by granting effectively unlimited repo credit to government security dealers—continuously offering $1 trillion of daily overnight repo, $500 billion of one-month repo and $500 billion in 3-

[1] Quoted in Tommy Stubbington, "US Bond Market Volatility Hits Highest Level since 2009," *Financial Times*, March 16, 2020.

month repo to dealers in Treasuries for more than a year after the outbreak of the crisis. It also temporarily exempted Treasury securities from bank capital requirements, enabling bank holding companies (and their dealer subsidiaries) to hold more government debt without having to raise additional capital.[2]

These interventions worked. Market panic subsided by mid-April. Still, the necessarily massive scale of ongoing Fed operations in the government securities market raised serious doubts about the private dealer infrastructure that had long served as the "silently beating heart" of the global financial system.[3] Central bankers around the world questioned whether U.S. dealers had adequate capacity to "maintain an orderly market for Treasury securities" and guarantee "reliable Treasury prices."[4] Major bond traders called on the Federal Reserve to abandon a decades-long commitment to market governance for long-term Treasuries and control bond prices directly.[5] Federal Reserve officials, while stopping short of direct yield curve control,

[2] At the time of writing, April 2021, the purchases and repo facilities were ongoing. The temporary exclusion of Treasury debt from key capital requirements—known as the Supplementary Leverage Ratio (SLR)—expired at the end of March 2021. See Darrell Duffie, "Still the World's Safe Haven? Redesigning the U.S. Treasury Market After the COVID-19 Crisis," Hutchins Center Working Paper no. 62 (Washington DC: Hutchins Center on Fiscal and Monetary Policy at Brookings, June 2020), https://www.brookings.edu/research/still-the-worlds-safe-haven/; Jeffrey Cheng et al., "What's the Fed Doing in Response to the COVID-19 Crisis? What More Could It Do?," *Brookings* (blog), March 30, 2021, https://www.brookings.edu/research/fed-response-to-covid19/.

[3] This phrase was used in an internal presentation at the U.S. Treasury to refer to the repo markets in U.S. Treasuries that support dealer operations, allowing dealers to provide broader market liquidity. Office of Debt Management, "Treasury Presentation to TBAC: Fiscal Year 2013 Q3 Report," https://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/Documents/Archive%20TBAC_%20Discussion_Charts.pdf.

[4] John Dizard, "Squabbles between Dealer Banks and Activists Pose Risk of Trouble for Biden," *Financial Times*, January 16, 2021.

[5] Mark Cabana, interest rate strategist at Bank of America, and Bob Michele, chief investment officer of JP Morgan Asset Management, both publicly pushed for yield-curve control following the collapse in the Treasury market. Colby Smith, "Why the Fed Should Put the Treasuries Market on a War Footing," *Financial Times*, March 28, 2020.

conceded that indirect support of the Treasury market might be necessary for some time to come. Randal Quarles, Vice Chair of Supervision for the Fed's Board of Governors, noted that the "sheer volume" of new government debt "may have outpaced the ability of the private-market infrastructure to … support stress of any sort there."[6] If the private dealers could not ensure orderly market conditions, the Federal Reserve would have to.

Liquidity Support or Debt Monetization?

The years since the global financial crisis of 2007-9 have seen an explosion of scholarship examining the critical role of the state in providing liquidity to financial markets.[7] The structural dependency of money markets on publicly issued "safe assets"—primarily Treasury securities—has been of particular interest to economists in this period.[8] The March 2020 meltdown showed, however, that the status of U.S. government debt as the world's premier "risk-free" asset could not be taken for

[6] Quoted in Michael Derby, "Fed Official Wonders Whether Treasury Market Can Handle Massive Issuance Alone," *Wall Street Journal*, October 14, 2020.
[7] See, e.g., Perry Mehrling, *The New Lombard Street: How the Fed Became the Dealer of Last Resort* (Princeton, N.J: Princeton University Press, 2010); Bengt Holmström and Jean Tirole, *Inside and Outside Liquidity* (Cambridge, MA: MIT Press, 2011); Morgan Ricks, *The Money Problem: Rethinking Financial Regulation* (Chicago: University of Chicago Press, 2016); Robert Meister, *Justice Is an Option: A Democratic Theory of Finance for the Twenty-First Century* (Chicago: University of Chicago Press, 2020).
[8] See Pierre-Olivier Gourinchas and Olivier Jeanne, "Global Safe Assets," BIS Working Papers no. 399 (Basel, Switzerland: Bank of International Settlements, 2012); Gary B Gorton and Guillermo Ordoñez, "The Supply and Demand for Safe Assets," NBER Working Papers no. 18732 (Cambridge, MA: National Bureau of Economic Research, 2013); "Sovereign Risk: A World without Risk-Free Assets?," BIS Papers no. 72 (Bank for International Settlements, 2013); Daniela Gabor, "The (Impossible) Repo Trinity: The Political Economy of Repo Markets," *Review of International Political Economy* 23, no. 6 (2016): 967–1000; Carolyn Sissoko, "The Collateral Supply Effect on Central Bank Policy" (SSRN, August 21, 2020), https://dx.doi.org/10.2139/ssrn.3545546.

granted.[9] The safety of Treasury debt was only as good as the Federal Reserve's willingness to guarantee it.

As the Federal Reserve moved aggressively to counter disorder in the bond market, Congress embarked on a program of fiscal expansion at a scale not seen since the Second World War. Between March 2020 and March 2021, the Federal Government ran a $3.6 trillion deficit. In the same period, $2.4 trillion of the debt issued to cover this deficit was purchased by the Fed. Such astronomical figures cast serious doubt on the idea that U.S. Government securities are meaningfully subject to market pricing. Large scale bond purchases and liquidity support has led to widespread allegations on Wall Street that the Fed is "monetizing the debt"—"printing money" to finance government deficits—rather than allowing bond markets to keep fiscal deficits in check.[10] Conversely, for politicians and commentators on the

[9] It is standard practice in financial economics to treat Treasury securities as the paradigmatic risk-free asset. The Capital Asset Pricing Model (CAPM), one of the most widely used models in modern finance theory, posits a "risk-free" rate of return as a key input into the model. Financial analysts and academics who use CAPM have long taken the yield on Treasury securities as a stand in for the model's benchmark "risk-free" rate. Sandip Mukherji, "The Capital Asset Pricing Model's Risk-Free Rate," *The International Journal of Business and Finance Research* 5, no. 2 (2011): 75–83; for the original formulation of the CAPM model, see William F. Sharpe, "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk," *The Journal of Finance* 19, no. 3 (1964): 425–42; John Lintner, "The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets," *Review of Economics and Statistics,* 47, no. 1 (1965): 13–37; for an intellectual history of the CAPM model, see Justin Fox, *The Myth of the Rational Market: A History of Risk, Reward, and Delusion on Wall Street* (New York: Harper Collins, 2009).

[10] Paul McCulley, former chief economist of the behemoth bond trader, PIMCO complained that "the church-and-state separation" between fiscal and monetary policy had broken down. Chris Brightman, Chief Investment Officer of the global asset management company Research Affiliates, maintained that the Fed's bond buying program was "turning into an experiment in debt monetization, which is when the central bank prints money to directly fund a government's spending." Brightman forecasted that the COVID crisis would likely end in a "loss of U.S. fiscal discipline"—"bad news for stocks, bonds and the dollar." The famed former Salomon Brothers executive Henry Kaufman took this line of reasoning further, predicting that Fed's accommodation of fiscal deficits would end capitalism as we know it: "With the federal government and the Fed firmly joined at the hip, the transformation of capitalism into statism is gaining momentum, perhaps irreversibly." Ben Holland, Liz Capo McCormick, and John Ainger, "The New Way to Print Money," *Bloomberg Businessweek*, May 25,

Left, such apparent debt monetization raises the question of why the Treasury should raise money in the bond market to begin with. In theory, the Treasury has the legal authority to mint a trillion-dollar coin. Why not use this power to finance the deficit directly, rather than relying on the Federal Reserve's discretionary power to accomplish much the same thing?[11]

Both lines of critique pose a dilemma for the Federal Reserve. Federal Reserve officials, charged with maintaining the value of money, understand that the credibility of the U.S. dollar as a reserve currency—and of the U.S. Treasury bond as a reserve asset—depends partially on the credibility of its claim that it will refuse to monetize to the Federal debt.[12] The narrative that bond yields are subject to market

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2020; Paul J. Davies and Caitlin Ostroff, "Why Covid-19 Aid, Inflation Fears Hold the Key to the Dollar's Future," *Wall Street Journal*, March 18, 2021, sec. Markets; Henry Kaufman, *The Day the Markets Roared* (Dallas, TX: Matt Holt Books, 2021), 170; this line of critique circulates among academic economists as well. See, e.g., Michael D. Bordo and Mickey D. Levy, "Do Enlarged Fiscal Deficits Cause Inflation: The Historical Record," NBER Working Papers, no. 28195 (National Bureau of Economic Research, 2020); George Selgin, *The Menace of Fiscal QE* (Washington DC: Cato Institute, 2020).

[11] Michigan Representative Rashida Tlaib formally called on the U.S. Treasury to finance COVID relief spending with trillion-dollar coin issuance in March 2020. The idea was initially floated during the confrontations over the debt ceiling that followed the 2007-9 financial crisis. Since then, legal scholar Rohan Grey has served as the proposal's chief academic proponent. See Rohan Grey, "Adminstering Money: Coinage, Debt Crises, and the Future of Fiscal Policy," *Kentucky Law Journal* 109, no. 2 (2020): 229; Matthew C. Klein, "Can Trillion-Dollar Coins Cover the Coronavirus Relief Tab? It's Not a Bad Idea," *Barron's*, March 26, 2020.

[12] This dilemma is a revised version of the famous dilemma proposed by Robert Triffin in a 1960 paper on the Bretton Woods system. Triffin argued that Bretton Woods was based on a fundamental contraction. The viability of the U.S. dollar as a reserve currency required both that (1) the United States would run a large enough current account deficit to provide sufficient dollar liquidity for a world economy, and (2) the United States would run a large enough current account surplus to maintain global confidence in the gold value of the dollar and prevent a run. Since both conditions could not be simultaneously fulfilled, Triffin argued that Bretton Woods was, in the long-run, untenable. Today, the dollar is no longer tied to gold and a so a "run" on the dollar cannot occur in the fashion that Triffin originally envisioned. Still, many economists (including officials at the People's Bank of China) believe that the contemporary dollar system is marred by an analogous contradiction—a fiscal version of the Triffin dilemma. On one hand, the U.S. government must supply the global financial system with enough "safe" assets to fulfill global financial market demands. On the other, maintaining confidence in the "risk-free" nature of Treasury bonds requires fiscal discipline (which shrinks the supply of outstanding government debt). See Robert Triffin, *Gold and the Dollar Crisis: The Future of*

expectations, and not excessive Federal Reserve manipulation, underwrites investor confidence in the value of U.S. dollars and U.S. Treasuries. If the Federal Reserve leaves the bond market to itself, the reasoning goes, overissue of either dollars or bonds will cause bond prices to fall (and yields to rise). With the U.S. Treasury obliged to raise funds in an competitive capital market, fiscal policymakers are forced to take market confidence into account. The dilemma, however, is that the celebrated capacity of the capital market to equilibrate supply and demand has distinct limits. In a panic, financial markets seize up, become disorderly, and cannot function without liquidity from the Federal reserve. In such a situation, failing to intervene in deteriorating bond markets can only lead to a disastrous collapse. On the other hand, the more aggressively the Fed intervenes to guarantee the safety of Treasury bonds, the more it risks undermining the public-facing narrative that fiscal policy is disciplined by markets. It risks the perception that it is monetizing the debt.

This dissertation examines the historical roots of this dilemma. Tracking the Federal Reserve's liquidity support policies in the government securities market during the early decades of the central bank's existence, I draw out the contradictions of the idea that Treasury securities should be simultaneously "risk-free" and subject to market pricing. Specifically, I examine how the discourse of *orderly markets* evolved to allow the Federal Reserve to square this circle. The idea that the Federal Reserve should take responsibility for maintaining orderly conditions in the

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Convertibility (New Haven, CT: Yale University Press, 1960); Zhou Xiaochuan, "Reform the International Monetary System," *BIS Review* 41 (2009); Emmanuel Farhi and Matteo Maggiori, "A Model of the International Monetary System," *The Quarterly Journal of Economics* 133, no. 1 (2018): 295–355.

government securities markets—that is, liquidity and price continuity—historically helped to legitimate the idea of market governance, even as it recognized market governance as inherently unstable. Orderly markets discourse acknowledged the ongoing liquidity support that was necessary to constitute (and re-constitute) the market space, but maintained that such support, far from distorting or undermining the market, facilitated the mechanism of competitive price discovery by suppressing volatile and speculative price movements. Even as bond markets regularly proved themselves incapable of basic functioning without government liquidity support, they were turned into a site of truth—a forum in which economic fundamentals, reflected in market prices, could be brought to bear on the activities of government.[13]

The dissertation is structured as a genealogy of the orderly markets concept—defined broadly as the idea that the state must safeguard the truth-producing capacity of markets against endogenous tendencies toward speculative disorder (such as asset bubbles, financial market panics, or consumer price inflation). If, in classical liberal thought, true prices are revealed through the process of market competition and equilibration of supply and demand, orderly markets discourse posits that regular, discretionary public interventions are necessary to ensure the integrity of the price mechanism. Recognizing that price dynamics can feed off themselves in mimetic, self-referential spirals (and will not necessarily lead to a stable equilibrium), this discourse puts public authorities in a position of determining which price movements

[13] I borrow the idea of markets as a "site of truth" from Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978-79*, ed. Michel Senellart, Francois Ewald, and Alessandro Fontana, trans. Graham Burchell (New York: Picador, 2008), 31.

are "orderly," reflecting true values in the underlying real economy, and which are "disorderly," reflecting purely nominal factors.[14]

In the following chapters, I trace the political struggles that shaped this conception of the state/market divide. Beginning with debates surrounding the Federal Reserve's obligation to support the "orderly marketing" of agricultural produce during the depression of 1920-21 and culminating with the Federal Reserve's experiments with a "free" bond market in the 1950s, I examine the basic political indeterminacy that the modifier "orderly" injects into the ideological ideal of free markets.

The primary focus of this study is the U.S. government securities market. But I also cast a wider net, examining how the discourse of orderly markets enabled the uneven application of market discipline across different sectors of the economy. The Federal Reserve's liquidity support under the orderly markets rubric provided free liquidity to the financial sector, stabilizing asset values and shielding owners from disorderly disaccumulation. At the same time, I show that Fed officials were distinctly less sympathetic to the impact of speculative disorder in other economic sectors. The farmer hoping for relief during the economic depressions of the 1920s and 1930s, the laborer hoping for some measure of security against persistent unemployment, the interned Japanese American looking for protection against the

[14] Speculative, mimetic price dynamics are often relegated to the conceptual periphery of mainstream economics. They are understood as market failures, or a result of institutional rigidities. André Orléan has powerfully argued that such mimetic dynamics should be at the center of economics as a discipline. In his view, moments of self-referential price spirals are not anomalous examples of market *failure*; rather, they reveal a basic truth about how markets *work*. See André Orléan, *The Empire of Value: A New Foundation for Economics*, trans. M.B. DeBevoise (Cambridge, MA: MIT Press, 2014).

disorderly liquidation of their home during World War II—all took a back seat to the demands of banks and insurance companies.

The unevenness of the Federal Reserve's market support operations made it politically vulnerable. For this reason, I argue that Fed officials sought to minimize public awareness of their bond market support operations in the aftermath of the Second World War. The goal, instead, was to promote the ideal of market pricing as an objective, internally consistent logic that was applied evenly across sectors. This was accomplished by establishing both an institutional and a discursive separation between liquidity support and other interventions in the market that were perceived as more directly political. Differentiating liquidity provision from "debt monetization" was especially important. I show how liquidity support was gradually recast into a purely technical measure, a tweak to the "plumbing" of the financial system, to use the metaphor that is so widespread today.[15] This occurred even though liquidity support quite literally *made the market* for government securities. Without Federal Reserve support, private securities dealers would never have been able to guarantee

[15] The metaphor is pervasive in the financial press. See, e.g., Jeanna Smialek and Matt Phillips, "Troubles Percolate in the Plumbing of Wall Street," *New York Times*, March 12, 2020, sec. Business; "How to Fix the Market for Treasury Bonds," *The Economist*, November 5, 2020, https://www.economist.com/leaders/2020/11/05/how-to-fix-the-market-for-treasury-bonds. The metaphor is often invoked by Fed officials as well. In 2009, Ben Bernanke argued that strengthening the "financial plumbing"—that is, "the institutions that support trading, payments, clearing, and settlement"—would be one of the main ways to address the problem of systemic risk. In a later speech, Bernanke stated, "Congress hires the Fed to manage monetary policy in part for the same reasons that I hire a professional to solve my plumbing problems—and while I hold the plumber accountable for fixing the problem, I don't second-guess the specific actions that he takes, because I recognize that my kibitzing would only worsen the outcomes." Ben S. Bernanke, "Financial Reform to Address Systemic Risk" (Council on Foreign Relations, Washington DC, March 10, 2009), https://www.federalreserve.gov/newsevents/speech/bernanke20090310a.htm; Ben S. Bernanke, "Monetary Policy in a New Era," in *Evolution or Revolution?: Rethinking Macroeconomic Policy after the Great Recession*, ed. Olivier Blanchard and Lawrence H. Summers (Cambridge, MA: MIT Press, 2019), 34–35.

the kind of deep, continuous market for Treasuries that makes them such a highly valued, risk-free asset today. And yet, minimizing and erasing liquidity support was equally necessary to make the market in a broader, narrative, sense. If the Federal Reserve's liquidity injections were too conspicuous, it would be impossible to credibly establish the idea that the price of Treasury securities was an expression of fundamental supply-and-demand dynamics and not the result of Federal Reserve interventions. For bond trading to become a "market," the public had to be convinced that prices were a matter of economics and not politics.

The contemporary significance of this history is that, in our current political conjuncture, Federal Reserve officials and financial journalists alike seem eager to forget the fact that bond markets are politically constituted. Already, just one year after the bond market meltdown and subsequent Fed bailout, the events of March 2020 are being described as "The Financial Crisis the World Forgot."[16] Mainstream financial journalists are once again raising the specter of "bond vigilantes"—speculators who short the bond market to signal discontent with the current fiscal/monetary policy mix and to force interest rates up.[17] The history of orderly markets discourse presented here serves as a potent reminder that bond markets are not a natural force capable exerting a downward gravitational pull on public spending. Rather, the extent to which state functions are subject to market discipline is matter of political struggle, institutional design, and historical contingency. Today,

[16] Jeanna Smialek, "The Financial Crisis the World Forgot," *New York Times*, March 16, 2021.
[17] See, e.g., Chris Gash, "Bond Vigilantes Are Signaling That Fiscal Deficits May Be Getting out of Hand," *New York Times*, March 26, 2021; Kate Duguid, "Bond Managers Say Pace of Rise in U.S. Bond Yields 'Unsettling,'" *Reuters*, March 19, 2021.

when we are on the precipice of a new economic paradigm, with mainstream politicians making tenuous first steps away from a decades-long neoliberal consensus, it is crucial to push back against the tendency to re-naturalize markets. There is no economic law dictating that a democratic government must grant bond investors veto power over public spending. Understanding this fact is crucial if public finance is to be mobilized for urgently necessary public projects like green development, free higher education, or universal healthcare.

The Working Fictions of a Fiat Money Regime

My line of inquiry in this study is strongly influenced by Modern Monetary Theory (MMT). In the past few decades, MMT economists have convincingly argued that the narrative depicting bond markets as an autonomous force capable of vetoing fiscal policy in sovereign, currency-issuing countries is a fiction.[18] Such governments, they maintain, spend money into existence. Strictly speaking, they have no need to "finance" that spending by issuing bonds (or raising taxes) in the first place.[19] For this reason, stories of "bond vigilantes" overriding the spending priorities of democratic

[18] This narrative was particularly prevalent during the early 1990s, when long-term rates were rapidly climbing. The *New York Times* reported in early 1994, for instance, that "More than any other group, the bond market's members determine how many Americans will have jobs, whether the job holders will have enough to afford a house or a car, or whether a factory might have to lay off workers. In sum, the American economy is governed by the bond market." Louis Uchitelle, "Why America Won't Boom," *New York Times*, June 12, 1994, sec. The Week in Review.

[19] Stephanie Bell, "Do Taxes and Bonds Finance Government Spending?," *Journal of Economic Issues* 34, no. 3 (2000): 603–20. Since publishing this seminal paper, Bell (now Stephanie Kelton) has become the public face of Modern Monetary Theory. Her recent trade book popularizing the ideas of MMT made it on to the *New York Times* bestseller list. See Stephanie Kelton, *The Deficit Myth: Modern Monetary Theory and the Birth of the People's Economy* (New York: Public Affairs, 2020).

states have always been misleading. "Bond markets cannot hold the nation hostage," MMT concludes. In the last instance, "the central bank can always overrule them."[20]

I believe this argument is both politically consequential and technically correct. Still, I am convinced that understanding why the Federal Reserve strenuously avoids the perception that it is "overruling" bond markets—even if it *could*—requires that we take a step further.[21] As Nina Boy eloquently explains, it is not enough to denounce mainstream economics for its unrealistic abstractions. Instead, we need to investigate how the "working fictions" of economics powerfully structure our institutions and economic lives, even when they are recognized as fictions.[22]

The idea that working fictions play an important role in monetary policy is well established in the interdisciplinary field of social studies of finance. Scholars in this field document how central bankers' economic projections, performative speech-acts and other "communicative experiments" shape both the informed expectations of seasoned financial traders and the "folk theories of money" that circulate among broader publics.[23] They also detail how the Federal Reserve has historically attempted

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[20] L. Randall Wray and Yeva Nersisyan, "Does the National Debt Matter?," *The Japanese Political Economy* 46, no. 4 (October 1, 2020): 265.

[21] Even as the Federal Reserve absorbed the lion's share of the 2020-21 fiscal deficit on its own balance sheet, Fed officials insisted that "Deficit financing and debt servicing issues play no role in our policy decisions and never will." Christopher J. Waller, "Treasury–Federal Reserve Cooperation and the Importance of Central Bank Independence" (Peterson Institute for International Economics, Washington DC, March 29, 2021), https://www.federalreserve.gov/newsevents/speech/waller20210329a.htm.

[22] Nina Boy, "The Backstory of the Risk-Free Asset: How Government Debt Became 'Safe,'" in *Central Banking at a Crossroads*, ed. Charles Goodhart et al. (Anthem Press, 2014), 184.

[23] Douglas R. Holmes, *Economy of Words: Communicative Imperatives in Central Banks* (Chicago: University of Chicago Press, 2013), 1; Benjamin Braun, "Speaking to the People? Money, Trust, and Central Bank Legitimacy in the Age of Quantitative Easing," *Review of International Political Economy* 23, no. 6 (2016): 1067; John Hogan Morris, "The Performativity, Performance and Lively Practices in Financial Stability Press Conferences," *Journal of Cultural Economy* 9, no. 3 (2016): 245–

to depoliticize monetary policy by narrating policy choices as if they were driven by autonomous market forces.[24] A common theme in all this work is that the stories central bankers tell about money—whether grounded in elaborate formal models, informal heuristics or cynical public relations campaigns—are an essential part of what money is, and how it is produced.[25]

Building on the insights of this work, my research asks how the discursive framework of orderly markets helped to construct and legitimate the fiat money regime of the modern United States. During the period in question, 1920-1961, the monetary system of the United States evolved from one that issued money primarily against private, short-term commercial credit instruments to one that issued money almost entirely against public debt. The approach to monetary governance also evolved in this period from one focused on gold flows and the international role of the dollar to one focused primarily on domestic financial and macroeconomic stability.[26] Although the U.S. dollar remained formally tethered to gold, large international inflows in the run-up to World War II rendered gold convertibility increasingly irrelevant as a constraint on monetary policy. This changed the meaning

60; Brett Christophers, "The Performativity of the Yield Curve," *Journal of Cultural Economy* 10, no. 1 (2017): 63–80.

[24] Greta R. Krippner, *Capitalizing on Crisis: The Political Origins of the Rise of Finance* (Cambridge, MA: Harvard University Press, 2012), chap. 5.

[25] Geoffrey Ingham, one of the preeminent scholars in the sociology of money, captures this point nicely: "[M]onetary policy is not simply a matter of functionality; it is also the result of social and political struggle in which economic theory informs, and gives meaning to, the conflicting interests. In contradiction to the positive implications of mainstream economics' naturalist concept, theories of money are an essential part of the social process of producing money." Geoffrey Ingham, *The Nature of Money* (Cambridge, UK: Polity, 2004), 56–58.

[26] For a compelling case that the establishment of the Federal Reserve system was motivated primarily by a desire to enhance the international prestige of the dollar, see J. Lawrence Broz, *The International Origins of the Federal Reserve System* (Ithaca, NY: Cornell University Press, 1997).

of the dollar. Where gold parity was a quasi-sacralized value in the 1920s, in the new fiat regime, the value of money emerged from a complex interweaving of fiscal policy, consumer price stabilization, and national economic growth.[27]

One of the paradoxical features of such a fiat regime (one among many) is that its legitimacy depends to a large extent on the denial of its existence. As the financial columnist Nathan Lewis pithily notes, a fiat money system means that "a government can, in part, pay its bills with the printing press, but this works best when the government acts as if it cannot."[28] Indeed, as long as the market for government securities fuses the production of money to the state fiscal apparatus, the state will always be vulnerable to complaints from creditors that it is debauching the currency and monetizing the debt.

The response to such complaints is typically vigorous denial, aimed at shoring up the working fiction that governments are barred from access to the (metaphorical) printing press. This was a key goal of the Treasury-Federal Reserve Accord of 1951, covered in chapter 5, which committed the Fed "to minimize the monetization of the public debt."[29] The idea behind this agreement was to signal to markets and a broader public that the Federal Reserve would no longer directly support the price of public debt, as it did during World War II, and would make monetary policy exclusively

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[27] For an excellent historical study of central bankers' moralistic devotion to gold parity in the interwar era, see Liaquat Ahamed, *Lords of Finance: The Bankers Who Broke the World* (New York: Penguin Books, 2009).
[28] Nathan Lewis, "The Problem With 'Modern Monetary Theory' Is That It's True," *Forbes*, February 21, 2019, https://www.forbes.com/sites/nathanlewis/2019/02/21/the-problem-with-modern-monetary-theory-is-that-its-true/.
[29] Board of Governors of the Federal Reserve System, "Thirty-Eighth Annual Report of the Federal Reserve Board Covering Operations for the Year 1951," 1952, 4.

oriented toward the "real economy." With bond yields left to the market, the Treasury's fundraising conditions would be subject to the iron laws of supply and demand. Or so the story went.

Determining whether the Federal Reserve is monetizing the debt, however, is not as simple as inspecting its balance sheet. In the most literal sense, the Federal Reserve is constantly monetizing and demonetizing the debt as a matter of basic operating procedure. Since the 1930s, the Fed has executed the vast majority of its monetary policy through interventions in the secondary market for Treasury securities. The Federal reserve purchases and sells (monetizes and demonetizes) government debt daily, or even hourly, to affect credit conditions. But to claim the Fed is monetizing the debt, as opposed to engaging in routine open market operations, typically implies something more. It implies that the Fed's purchases of government debt are undertaken with the express *intent* of using money creation as a permanent source of government financing, and not with the intention of fulfilling its formal mandates. For this reason, economists usually agree that debt monetization is a matter of the intention and purpose of the Federal reserve's actions, rather than being a literal question of whether the Federal reserve is converting Treasury securities into money.[30] Murder versus manslaughter is the relevant analogy, not guilt versus innocence. The commitment to minimize the monetization of the debt—a

[30] See Daniel Thornton, "Monetizing the Debt," *Economic Synopses - Federal Reserve Bank of St. Louis*, no. 14 (2010); David Andolfatto and Li Li, "Is the Fed Monetizing Government Debt?," *Economic Synopses - Federal Reserve Bank of St. Louis*, no. 5 (2013); Aidan Lawson and Greg Feldberg, "Monetization of Fiscal Deficits and COVID-19: A Primer," *Journal of Financial Crises* 2, no. 4 (2020): 36.

commitment which underwrites the institutional separation of fiscal and monetary policy in the United States to this day—is, in this sense, a matter of narrative. It less about policy actions themselves, and more about the way that actions are explained and framed.

One of the key arguments of this dissertation is that the discourse of orderly markets allowed the Federal Reserve to introduce a narrative distinction between the kind of short-term support that guaranteed the market liquidity of Treasury securities and longer-term interventions that might upset market confidence. This distinction was crucially important for bankers and other large institutional investors in the Treasury market. The U.S. financial sector needed guaranteed liquidity in the secondary market for Treasuries to hedge against the vicissitudes of the capitalist credit cycle, but they were also anxious that such a guarantee might pave the way to fiscal dominance—a situation in which guaranteed monetary funding of the public debt would allow a political administration to spend without taking heed of market confidence. Orderly markets discourse in the bond market was fundamentally about demarcating the level of market support that was acceptable to, and indeed demanded by, banks and major institutional investors while at the same time refusing to cross the ambiguous and ill-defined boundary into debt monetization. It allowed the Federal Reserve to maintain a public commitment to austerity as the bitter medicine necessary to maintain discipline in labor and commodity markets even as it relaxed discipline in financial markets.

The genealogy of orderly markets discourse that I present here is thus inextricable from the power that private finance has historically exerted in the U.S. monetary system. Much of what follows is dedicated to examining the interactions and interdependencies between the Federal Reserve System and private bankers, bond dealers, and insurance executives. Throughout the dissertation, I rely heavily on records of meetings of the American Bankers Association, the Federal Advisory Council (a body comprised of top banking executives that meets with Federal Reserve officials multiple times each year), and other industry groups to document the power of the banking sector to shape policymakers' ideas about the meaning of orderly markets.

These archival records of direct lobbying illustrate the *instrumental* power of the financial sector—the power finance exerts as an organized, self-conscious interest group.[31] In addition to instrumental power, I also document the *infrastructural* power that the financial sector came to wield because of its institutional position in the U.S. monetary system. This term, initially coined by sociologist Michael Mann to describe the "capacity of the state to … penetrate civil society" has recently been repurposed by political economist Benjamin Braun to describe a unique aspect of financial sector power over the state, and particularly over the central bank.[32] If governments seek to

[31] Recent scholarship on the instrumental power of the financial sector has been especially concerned with how concentrations of wealth allow bankers and financiers to buy access to policymakers. See, e.g., Jacob S. Hacker and Paul Pierson, *Winner-Take-All Politics: How Washington Made the Rich Richer--and Turned Its Back on the Middle Class* (New York: Simon & Schuster, 2010); Simon Johnson and James Kwak, *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown* (New York: Vintage, 2010).

[32] Michael Mann, "The Autonomous Power of the State: Its Origins, Mechanisms and Results," *European Journal of Sociology* 25, no. 2 (1984): 189; Benjamin Braun, "Central Banking and the

harness the power of financial markets in order to build state capacity, Braun suggests that this process is a two-way street: In practice, governing through markets often means allowing market actors to govern. The more state agencies seek to govern through financial markets, the more infrastructural power accrues to private financial actors. Here, I focus on the historical contingencies that led the Federal Reserve to implement monetary policy primarily through participation in the market for government securities. I detail how this granted infrastructural power to the bankers and dealers who comprise this market—how the confidence of these private actors became integral to the smooth functioning of the monetary system.

The power of private finance in the monetary system was not foreordained. The historical arc presented here is punctuated by key political struggles that threatened to erode the influence of private bankers and dealers. The Roosevelt administration's monetary experiments in the 1930s, the emergency interest rate freeze during World War II, the Truman administration's push to maintain frozen rates after the war, and Texas Congressman Wright Patman's populist proposals for radically overhauling the Federal Reserve System in the 1940s and 1950s—all these measures put the infrastructural power of private finance in jeopardy. As we will see, rhetoric opposing such measures as "totalitarian" and fundamentally opposed to a market-based social order proved extraordinarily effective in maintaining the central role of private bankers and dealers in the system (especially as the Cold War took

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Infrastructural Power of Finance: The Case of ECB Support for Repo and Securitization Markets," *Socio-Economic Review* 18, no. 2 (2020): 395–418.

off). At the same time, the idea that bond markets should be orderly, rather than free helped to ensure that bondholders themselves would be sheltered from the very market discipline that they espoused.

The research presented here thus contributes to a growing body of scholarship dedicated to challenging the economic orthodoxy that money is a neutral technology of market exchange.[33] Against this view (which remains entrenched in neoclassical macroeconomics) legal scholars have painstakingly documented the hierarchical and irreducibly political nature of monetary institutions.[34] Historians have likewise become more attuned in recent years to the political struggles that have historically driven major transformations in the architecture of money.[35] The story I tell here adds to this literature by providing a close examination of how the U.S. fiat regime emerged as a private-public partnership—built on public debt, but rooted in the

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[33] For a canonical statement of this view, see Robert Lucas, "Nobel Lecture: Monetary Neutrality," *Journal of Political Economy* 104, no. 4 (1996): 661–82. Macroeconomists have long differed on the question of precisely *how* neutral money is (i.e. whether market imperfections and nominal rigidities allow monetary policy some scope for influencing real economic outcomes in the short term), but the long-run neutrality of money remains a widely shared assumption in neoclassical macroeconomics. Outside of the neoclassical mainstream, economists working in heterodox Keynesian traditions—particularly those influenced by Hyman Minsky—have long disputed this assumption. See, e.g. Hyman P. Minsky, "On the Non-Neutrality of Money," *Federal Reserve Bank of New York Quarterly Review* 18, no. 1 (1993): 77–82.

[34] See Christine Desan, "The Market as a Matter of Money: Denaturalizing Economic Currency in American Constitutional History," *Law & Social Inquiry* 30, no. 1 (2005): 1–60; Christine Desan, *Making Money: Coin, Currency, and the Coming of Capitalism* (Oxford: Oxford University Press, 2015); Katharina Pistor, "Moneys' Legal Hierarchy," in *Just Financial Markets?: Finance in a Just Society*, ed. Lisa Herzog (Oxford, UK: Oxford University Press, 2017), 185–204.

[35] See, e.g., Jotham Parsons, *Making Money in Sixteenth-Century France: Currency, Culture, and the State* (Ithaca, NY: Cornell University Press, 2014); Rebecca L. Spang, *Stuff and Money in the Time of the French Revolution* (Cambridge, MA: Harvard University Press, 2015); Jeffrey Sklansky, *Sovereign of the Market: The Money Question in Early America* (Chicago: University Of Chicago Press, 2017); Woody Holton, "The Capitalist Constitution," in *American Capitalism: New Histories*, ed. Sven Beckert and Christine Desan (New York: Columbia University Press, 2018), 35–62; Christopher W. Shaw, *Money, Power, and the People: The American Struggle to Make Banking Democratic* (Chicago: University of Chicago Press, 2019).

working fiction that debt would be privately priced and purchased in a competitive market rather than monetized by the Federal Reserve. This fiction entrenched the infrastructural power of private banks and dealers as delegated issuers of public credit and ostensive "financiers" of public debt, even as both ultimately relied on the Fed for liquidity.

Modern Money as a Site of Boundary Struggles

Before going any further, it is worth taking a moment to explain the approach to money that underpins this work. I start from the basic assumption that money is not a thing but a social relation.[36] In fact, it is an exceedingly complex set of social relations: between sovereign states, taxpayers and public creditors;[37] between commercial banks and their depositors, borrowers, equity investors, and public regulators;[38] between workers and capitalists struggling over the distribution of incomes;[39] between gendered spheres of social life;[40] between individuals and

[36] Geoffrey Ingham, "Money Is a Social Relation," *Review of Social Economy* 54, no. 4 (1996): 507–29.
[37] Abba P. Lerner, "Money as a Creature of the State," *The American Economic Review* 37, no. 2 (1947): 312–17; Pavlina R. Tcherneva, "Chartalism and the Tax-Driven Approach to Money," in *A Handbook of Alternative Monetary Economics*, ed. Philip Arestis and Malcolm Sawyer (Cheltenham, UK; Northhampton, MA: Edward Elgar, 2006), 69–86.
[38] Calomiris and Haber theorize money as a "game of bank bargains," or a network of contracts that banks enter into with governments, creditors, debtors, bank insiders (founders, management and majority shareholders), and minority shareholders. See Charles W. Calomiris and Stephen H. Haber, *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit* (Princeton, NJ: Princeton University Press, 2014), chap. 2.
[39] Robert E. Rowthorn, "Conflict, Inflation and Money," *Cambridge Journal of Economics* 1, no. 3 (1977): 215–39.
[40] Viviana A. Zelizer, *The Social Meaning of Money* (1997; repr., Princeton, NJ: Princeton University Press, 2017); Viviana A. Zelizer, *The Purchase of Intimacy* (Princeton, N.J.: Princeton University Press, 2007).

society;[41] and between layers of firms and individuals organized hierarchically in a pyramid of balance sheets.[42]

The list could go on. What is important for our purposes is to recognize that there is not necessarily a stable essence underlying these varied aspects of money. As Dick Bryan and Michael Rafferty argue, money is better understood as a dynamic and unstable process of commensuration between its heterogeneous attributes. In normal times, the parity, liquidity and fungibility of different social functions and institutional registers of money are easily taken for granted. In such times money might seem to approximate its textbook definitions that focus on neutral functionality and universal acceptance. But this universality always has seams. When crises erupt, seams burst. Parity breaks down, commensurable values become incommensurable and liquid assets become illiquid. The heterogeneity of money reasserts itself.[43]

The research I present here focuses on one particularly important seam in the fabric of modern money: the commensuration between money as a liability of the state and money as a liability of private banks.[44] In the monetary system of the

[41] Michel Aglietta, *Money: 5,000 Years of Debt and Power*, trans. David Broder (New York: Verso, 2018).
[42] Perry Mehrling, "The Inherent Hierarchy of Money," in *Duncan Foley Festschrift*, 2012.
[43] Dick Bryan and Michael Rafferty, "Decomposing Money: Ontological Options and Spreads," *Journal of Cultural Economy* 9, no. 1 (2016): 27–42.
[44] In heterodox economics, we can see this seam emerge in the tensions between the chartalist tradition (represented today by Modern Monetary Theory), which emphasizes the state's constitutive role in money creation, and the post-Keynesian tradition of endogenous money, which focuses on the role of bank credit. For examples of post-Keynesian critiques of the chartalist tradition, see Louis-Philippe Rochon et al., "State Money and the Real World: Or Chartalism and Its Discontents," *Journal of Post Keynesian Economics* 26, no. 1 (2003): 57–67; Marc Lavoie, "The Monetary and Fiscal Nexus of Neo-Chartalism: A Friendly Critique," *Journal of Economic Issues* 47, no. 1 (2013): 1–32. For a chartalist response to such criticism, see Eric Tymoigne and L. Randall Wray, "Modern Money Theory 101: A Reply to Critics" (Annandale-on-Hudson, NY: Levy Economics Institute of Bard College, 2013).

contemporary United States, most of the money that we use is issued by private banks. While we might occasionally transact in cash (Federal Reserve notes), most of the time we make payments using deposits in commercial bank accounts. These deposit liabilities are, for all intents and purposes, money. They are money, moreover, that is issued by private banks and not by the government. Contrary to popular understanding (and most introductory economics textbooks) banks are not "intermediaries" that collect hard, government-issued, currency from depositors and then profit by relending that currency at a higher rate, while keeping a "fraction" on reserve in case depositors need to make withdrawal. Instead, when a bank makes a loan, it creates deposit liabilities *ex nihilo*. Banks neither loan out deposits nor loan out reserves; rather, loans create deposits.[45]

If private banks issue money, their ability to do so is always conditioned by state policy. In the first instance, public spending can directly create deposits for which commercial banks are liable. After the Federal Government initiated its first round of fiscal stimulus during the COVID pandemic, for example, commercial banks' deposit liabilities ballooned by $2.5 trillion.[46] This kind of growth in deposit liabilities occurs whenever fiscal expansion is accommodated by loose monetary policy. The growth of private banks' balance sheets can likewise be restricted by

[45] The idea that loans make deposits, and not the other way around, is a hallmark of the post-Keynesian view of endogenous money. The classic articulations of this view are Basil J. Moore, "The Endogenous Money Stock," *Journal of Post Keynesian Economics* 2, no. 1 (1979): 49–70; Marc Lavoie, "The Endogenous Flow of Credit and the Post Keynesian Theory of Money," *Journal of Economic Issues* 18, no. 3 (1984): 771–97.
[46] Allissa Kline, "Deposit Glut Could Dog Banks Well into next Year," *American Banker* 185, no. 194 (October 7, 2020): 2–3.

government policy—either directly, through emergency credit controls (as the Truman administration proposed during a period of postwar inflation), or indirectly, through restrictive monetary policy at the central bank.[47] Finally, at the most general level, the moneyness of a private bank's deposit liabilities depends on the government's guarantee that those deposit liabilities will be convertible at par to government-issued money, acceptable as legal tender in contracts, and acceptable as a means of extinguishing tax liabilities. For this reason, legal scholars have characterized the U.S. monetary system as a "franchise arrangement," in which the sovereign authority to issue money is franchised to a private banking system, whose liabilities are accepted *ex ante* by the sovereign as liabilities of its own.[48]

The hybrid, public-private partnership of the U.S. monetary system sets the stage for what political theorist Nancy Fraser calls "boundary struggles" that contest the dividing line between economy and polity.[49] Fraser argues that such struggles are endemic to capitalism as an institutionalized social order predicated on the sphering of social life into private and public domains. When it comes to capitalist money, the conflicts can be particularly acute. Following the American Civil War, for instance,

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[47] Federal Reserve monetary policy never *directly* contracts the quantity of deposit liabilities in the commercial banking sector. Regulations like reserve requirements and capital requirements restrict bank lending not by reducing the quantity of money available to banks, but by putting pressure on bank profitability and liquidity. Bank lending is constrained neither by its quantity of deposit liabilities nor by the quantity of reserves it holds at the Federal Reserve. If a bank wants to make a loan, the institutional arrangement of the U.S. monetary system always makes reserves available to the bank at some price. A bank loan can always be funded. The question is whether it can be funded profitably. If the Federal Reserve wants to tighten credit conditions, it does so by raising the price of credit, not by constricting the quantity of money. See Scott T. Fullwiler, "An Endogenous Money Perspective on the Post-Crisis Monetary Policy Debate," *Review of Keynesian Economics* 1, no. 2 (2013): 171–94.

[48] Robert C. Hockett and Saule T. Omarova, "The Finance Franchise," *Cornell Law Review* 102, no. 5 (2016): 1143–1218.

[49] Nancy Fraser, "Behind Marx's Hidden Abode," *New Left Review* II, no. 86 (2014): 55–72.

bullionists in the financial sector fiercely argued for a return to gold-based currency to demarcate a realm of monetary value that was subject to the "natural laws" of the market, and fundamentally off limits to the "arbitrary laws" of intentional political manipulation. Bullionists demanded the swift retirement of greenbacks—a non-convertible paper currency that was issued directly by the Federal Government during the Civil War—and repayment of the national debt in gold coin rather than paper money. Farmers and workers, on the other hand, promoted the retention of greenbacks and repayment of the national debt in nonconvertible paper currency. Against the bullionists, the greenbackers understood money as a preeminently political institution that must be subject to direct popular control.[50]

We find an analogous boundary struggle at work in the period under examination here. Between 1920 and 1961, the financial sector gradually, if reluctantly, grew to accept a fiat currency regime. The major boundary struggle of this period, then, had less to do with the opposition of gold-backed to fiat currency and more to do with the role of market governance *within* a fiat regime. The bond market, rather than the gold market, emerged as a key site of contestation over the institutional boundary between polity and economy. Would bond prices, and thus the state's money-issuing capacity, be subject to market discipline? Or would Federal Reserve support of the bond market put fiscal policy in the driver's seat by allowing essentially unlimited monetization of the debt? To put it another way, would the fiat

[50] Bruce G. Carruthers and Sarah Babb, "The Color of Money and the Nature of Value: Greenbacks and Gold in Postbellum America," *American Journal of Sociology* 101, no. 6 (1996): 1556–91.

regime mean the return of greenbacks—of *political* money? Or would the money supply be *economic*, determined by fundamentals in the bond market? This was the exoteric question that drove much public debate.

The boundary struggle also involved a more esoteric, but no less important, question of financial stability. The new U.S. fiat money system required stable and continuous commensurability between money and public debt. Large financial sector institutions needed U.S. Treasuries to serve as a stable, relatively risk-free asset that enabled them to manage their exposure to economic downturns. Banks' and insurance companies' ability to store value in Treasuries, and to withdraw that value on demand with little risk of nominal loss, became central to their business. For this reason, the threat of a liquidity crisis in the secondary market for Treasuries involved a corresponding threat of broader financial instability. An illiquidity spiral in Treasuries, if unchecked, would lead to a precipitous capital loss for banks and other financial firms that held Treasuries. If severe enough, such a loss could threaten the solvency of much of the private financial sector, with substantial knock-on effects throughout the economy.

The financial sector, in short, required government debt to remain *liquid*. From this angle, the issuance of Treasury securities, and the Federal Reserve's support of their liquidity, appears as a kind of public subsidy, a form of "politically constituted property" for private finance.[51] Banks, franchised by the state to issue

[51] This concept was advanced by the Marxist historian Robert Brenner in his monograph on English merchants in the 16th and 17th centuries. His idea was to distinguish forms of surplus extraction predicated on juridical or military power (such as the benefits accruing to a noble due to their status) from forms of capitalist surplus extraction that were mediated by market dependence and formally

money, used this delegated power to "fund" the state, receiving a safe, interest-bearing store of value in return. In the process, money and asset values were created out of thin air.

Naturally, such a fiat loop would become politically vulnerable without external legitimation.[52] Transparently granting asset values as a matter of convention—mere *fiat*—would be difficult to justify in a social system where markets serve as the normative arbiters of true economic value.[53] If, as Karl Polanyi famously argued, gold parity legitimated money under the gold standard as a "fictitious commodity," ostensibly grounded in competitive commodity markets, the legitimacy of the burgeoning fiat regime would require a convincing story that the state could only raise money by entering a competitive financial market for loanable funds.[54]

This working fiction of a state-market boundary was beneficial for both private finance and the fiscal state, but the exact nature and location of this indeterminate boundary remained a matter of persistent political debate. As we will

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equal legal subjects. Recently, Brenner has suggested that the Federal Reserve's COVID-era bailout of corporate bond markets marks a significant return to politically constituted property rights, with the state directly injecting nominal value into privately held assets. See Robert Brenner, *Merchants and Revolution: Commercial Change, Political Conflict, and London's Overseas Traders, 1550-1653* (Princeton, NJ: Princeton University Press, 1993); Robert Brenner, "Predation Meets Decline: The Transition from Capitalism to Feudalism?" (UMass Amherst Political Economy Workshop, Amherst, MA, April 27, 2021).

[52] I borrow the term "fiat loop" from Desan, *Making Money*, 311.

[53] As the anthropologist Mary Douglas argued, "conventions … are likely to be challenged all the time unless their justifying principle can be grounded in something other than conventions." Mary Douglas, *How Institutions Think* (Syracuse University Press, 1986), 48; quoted in Carruthers and Babb, "The Color of Money and the Nature of Value."

[54] Polanyi argues that, although money is "merely a token of purchasing power which, as a rule, is not produced at all, but comes into being through the mechanism of banking or state finance," gold parity made money appear to be governed by the same laws that govern commodities that are produced for sale by human labor—namely gold. It was with the help of this "fiction," moreover, that the actual institutions of money markets were organized. Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*, 2nd ed. (1944; repr., Boston, MA: Beacon Press, 2001), 75–76.

see in the chapters that follow, politicians like Wright Patman could push the boundary in one direction by leveraging the argument that bankers were little more than rentiers, turning the public's full faith and credit into private profits. Bankers, meanwhile, could push back by responding that the expansion of the fiscal state was undermining the integrity of the market. In moments of crisis, the seams connecting money as a liability of private banks and money as a liability of a democratic state would burst.

The Federal Reserve, and particularly the Federal Reserve's liquidity support in the government securities market, straddled the state-market boundary—a boundary, which, as Fabian Pape notes, "is profoundly shaped by the question of liquidity."[55] Liquidity crises destabilize the idea that financial markets are autonomous realms, capable of self-ordering. For this reason, the Federal Reserve's liquidity support became a key focal point of boundary struggles within the fiat system. As we will see, the orderly markets doctrine helped to narrate liquidity support as enabling the market to express true, fundamental, economic values, rather than artificially inflating asset values by political means. And as liquidity support was increasingly framed as a neutral technical operation, private bond purchases could appear as a service that the financial sector provided to the state, as opposed to a subsidy that the state provided to the financial sector.

[55] Fabian Pape, "Rethinking Liquidity: A Critical Macro-Finance View," *Finance and Society* 6, no. 1 (2020): 67–75.

Organization and Plan

The dissertation is organized into six chapters. Chapter 1 is a brief prologue, investigating the tensions between the early Federal Reserve's adherence to the "real bills" doctrine, on one hand, and demands from agrarian interests that it support the "orderly marketing" of farm products, on the other. Dating back to the populist farm movement of the late 19th century, the notion of orderly marketing initially developed as an argument for farm cooperatives. Cooperatives, by storing aggregate surpluses in years of bumper crops, and releasing them in years of poor harvests, could stabilize prices and incomes by ensuring that aggregate sales volumes remained relatively steady and "orderly." The goal was to prevent periodic gluts, which could depress prices and lead farmers into bankruptcy. The focal point of Chapter 1 is the question of how orderly marketing discourse influenced Federal Reserve policy during the 1920-21 depression. In this period, political pressure from agrarian interests pushed the Federal Reserve to loosen its adherence to the real bills doctrine. Where the real bills doctrine stipulated that the Federal Reserve should only advance money against short-term, self-liquidating commercial paper ("real bills"), and not long-term, speculative credit, farmers' agitation for support in the 1920-21 depression expanded the Fed's lending criteria to longer-term agricultural paper. A close reading of congressional debates and Federal Reserve policy documents reveals how disagreements about the meaning of orderly marketing helped to destabilize the real/speculative dichotomy that underwrote the real bills doctrine.

Chapter 2 shows how the idea of orderly marketing was transposed from agricultural finance to a growing market for U.S. Treasury securities. The chapter begins by tracing the confluence of factors that drove the Depression-era transition from a monetary regime based on gold and commercial credit to a regime based on public debt. In the new fiat regime, where the supply of money was governed by the Federal Reserve's purchases and sales of government debt, the question arose of how to keep money rooted in real economic fundamentals and minimize the subordination of money to democratic politics. The solution advanced by Federal Reserve officials and creditor interests was twofold. First, the Federal Reserve would make purchases and sales only in the secondary market for government securities (the "open market") and would be prohibited from directly financing public debt by making purchases from the Treasury. The goal, I argue, was not so much to disallow the state from "printing money," but to maintain the infrastructural centrality of bond markets in the monetary system. In particular, the Federal Reserve hoped to avoid the return of greenbacks (a form of money which bypassed bond markets) at all costs. Secondly, the Federal Reserve's interventions in the secondary market would maintain the appearance of market pricing. Rather than supporting the price of Treasury securities ("pegging"), the Fed would maintain *orderly* markets. The chapter concludes with an analysis of how the orderly markets standard was applied, first to stock markets, and then to the government securities market in the late 1930s. The pliability of the orderly markets concept made it ripe for politicization and boundary struggles over the dividing line between nominal, speculative, political, or otherwise "artificial"

monetary dynamics, on one hand, and real economic fundamentals, on the other. Examining the records of meetings between Federal Reserve officials, Treasury officials, and bankers on the Federal Advisory Council during the bond market panics of 1937 and 1939, I show how normative appeals to market pricing as a standard of truth become a kind of rhetorical currency in political struggles over price dynamics.

Chapter 3 outlines the seismic shifts that occurred in Federal Reserve policy during the Second World War. During the war, the Federal Reserve made a commitment to stabilize Treasury yields at fixed rates and subordinated its monetary policy to the fiscal needs of the Treasury. This period marked a hiatus from the framework of orderly markets, in favor of an emergency regime of fixed, or "pegged," interest rates. It was not, however, a period of unchallenged Treasury dominance, as is sometimes maintained. Instead, I argue that the short-lived experiment with pegged interest rates was a tenuous compromise that preserved private banks' central position in the U.S. monetary system, even as it guaranteed the Treasury access to low-cost financing. The banking lobby and the Federal Reserve supported the Treasury's war finance program and the need for interest rate stabilization. At the same time, they effectively warded off more radical proposals that would have challenged the public-private partnership at the core of the U.S. monetary infrastructure. A key argument of this chapter is that it was not inevitable that the war would be financed by selling liquid, interest-bearing public debt to private banks. The Second War Powers Act of 1942, Congressman Wright Patman's proposals for financing the war at zero percent interest, the Federal Reserve's

emergency issuance of unbacked paper currency in 1943—all these presented potential avenues for financing the war in a way that would have bypassed the banks. That these roads were not taken was a victory for bankers: the public-private franchise arrangement of the monetary system won out over more robust conceptions of public money.

Chapter 4 focuses on the rhetoric of "orderly reconversion" in the immediate postwar period—the gradual dismantling of the wartime command economy and the return to a peacetime system of free enterprise. I show how the temporality of orderly reconversion was politicized by bankers and other corporate lobby groups, who fought for rapid reinstatement of market discipline in labor, foreign exchange, and commodity markets while resisting the immediate resumption of market pricing in U.S. government securities. The chapter begins by examining how the rhetoric of orderly reconversion was employed in three settings: the congressional hearings on the Full Employment Bill of 1945, the debates over the Bretton Woods system, and the political struggles surrounding postwar price controls. In each case, labor interests and progressive politicians agitated for public interventions that would suppress disorderly market dynamics: structural unemployment, excessive exchange rate volatility, and runaway inflation, respectively. I show how the banking lobby worked with Federal Reserve officials and conservative allies in Congress to resist such interventions. They argued that order had to follow from reconversion, and that public efforts to ensure an orderly transition themselves tended to undermine the truth-producing capacity of markets.

When it came to the government securities market, however, bankers (along with Treasury and Federal Reserve officials) supported the continuation of the wartime regime of pegged interest rates. Despite general recognition that the extension of the peg into the postwar period was a key driver of inflation, bankers and Fed officials argued that ending the peg too quickly could only result in a bond market collapse that would force banks to book ruinous capital losses on their holdings of government debt. Agreement on this point kept the peg in place for several years after the war ended. Still, tensions surfaced about the question of inflation. In the second half of Chapter 4, I analyze Fed Chair Marriner Eccles' controversial proposal to institute a secondary reserve requirement—a regulatory regime which would make it mandatory for banks to hold a specified portion of their reserves in the form of government securities. The proposal, which would have limited banks' ability to liquidate their government security holdings on demand, was meant to suppress inflationary pressures by preventing debt monetization while keeping the peg in place. Bankers mercilessly opposed this measure. Congressional hearings on the Eccles plan show how bankers mobilized the rhetoric of orderly reconversion to push back against the secondary reserve requirement and defend the status quo, in which marketable Treasury securities were as liquid and risk-free as cash. Despite constant public moralizing about the perils of inflation, bankers' opposition to the Eccles plan reveals that they were far less concerned with tackling inflation than they were with maintaining the liquidity of their Treasury holdings.

The final two chapters assess the end of the Fed's wartime commitment to fix interest rates in the government securities market. Chapter 5 explores the Cold War roots of the Treasury-Federal Reserve Accord of 1951, the informal agreement that is often credited with establishing central bank independence in the United States. I argue that the prominence of free market rhetoric in this period obscures important continuities between the wartime regime of fixed interest rates and the ostensibly free post-Accord government securities market. In both eras, the Fed retained its commitment to support market liquidity and protect the banking sector from the risk of price volatility. The chapter starts by tracing how bankers' shifting attitudes toward the peg in the run-up to the Accord were shaped by both fears of a bond market collapse and their perception of the presidential administration's evolving fiscal priorities. Initially opposed to inflation-control techniques based on interest-rate policy, bankers hoped that fiscal austerity could be effective enough in containing inflation that ending the peg would not be necessary. After Cold War fiscal pressures rendered this prospect increasingly unrealistic, the idea of restoring flexible interest rates in the government securities market seemed more and more attractive to private bankers and Federal Reserve officials alike. I stress, however, that bankers' support for flexible interest rates as a means of inflation control was tenuous and conditional. Where existing scholarship depicts bankers in this period as single-mindedly focused on containing inflation at all costs—and interested in a return to a "free" government securities market as a means of suppressing inflation through higher interest rates—I highlight the fact that bond market *stability* was bankers' primary concern. To

convince bankers to support the Federal Reserve's pursuit of flexible interest rates and monetary policy autonomy, Fed officials had to convince them that interest-rate flexibility would mean an orderly market, not a free market. Market liquidity would be actively maintained; price volatility would be suppressed; and the Fed would not allow market pressures to bring interest rates too low for too long.

Chapter 6 investigates the changing modality of market support in the aftermath of the Accord. During this period, Federal Reserve Chair William McChesney Martin Jr. spearheaded a new approach for managing the government securities market. On one hand, he waged a public relations campaign stressing that his chairmanship would mean a definitive end to the era of the administered yield curve. It would be a return to a "free market" in government securities. The free market, as he understood it, meant that the Federal Reserve would abstain, as far as possible, from operating in the long end of the maturity spectrum. Instead, it would endeavor to influence credit conditions solely through the purchase and sale of short-term Treasury bills. The purported goal of this "bills only" policy was to ensure that the Fed's management of short-term money market conditions had as little influence as possible on the price of government securities and thus on the terms of (especially long-term) Treasury financing. In Martin's words, the Fed would remain "in absentia," allowing market forces to set the yield curve.

On the other hand, under Martin's supervision, the Federal Reserve developed new techniques to support the liquidity of the government securities market and to guarantee that new Treasury issues would not fail to attract sufficient bids. A central

argument of this chapter is that these new techniques—principally repurchase agreements with government security dealers—helped to ensure orderly market conditions without drawing the kind of intense speculation and media attention that more traditional open market operations tended to attract. I trace how these techniques were discursively constructed as defensive, technical corrections to market infrastructure rather than active and substantive interventions. This discourse obscured the constitutive importance of government liquidity support to the pattern of pricing in secondary markets and helped legitimate the idea that government fiscal capacity was limited by the autonomous powers of the bond market.

1. THE REAL BILLS DOCTRINE AND THE AGRARIAN CONCEPT OF ORDERLY MARKETING IN THE 1920-21 DEPRESSION

Years before the Federal Reserve offered any form of liquidity support to maintain order in government securities markets, it discounted agricultural loans to support the "orderly marketing" of crops. This chapter provides a brief political history of the orderly marketing concept, and its uneasy relationship with the "real bills" doctrine that provided the guiding economic framework for the early Federal Reserve. It concludes with an account of how the two doctrines collided during the 1920-21 depression. During this downturn, the divide between (orderly) commerce and (disorderly) speculation became politicized as farmers' demands for relief competed with the Federal Reserve's drive to resume the gold standard after World War I. These early debates over orderly marketing helped to establish the parameters for a concept of order that was later transferred to the government securities market.

Commerce and Speculation in the Real Bills Doctrine

When the Federal Reserve was founded in the Federal Reserve Act of 1913, there was little expectation that it would implement policy through operations in the market for U.S. government securities.[1] Private money markets were the focus, and credit policy was driven by the private demand for commercial lending. The theory underlying the 1913 Act, known as the "real bills" doctrine, posited that a bank need

[1] W. Randolph Burgess, "Reflections on the Early Development of Open Market Policy," *Federal Reserve Bank of New York Monthly Review* 46, no. 11 (November 1964): 219.

not exercise constraint on discount lending, as long as credits were advanced only against short-term, self-liquidating, commercial loans. Classically articulated by British Banking School economists in the mid 19th century, the doctrine was revived by turn-of-the-century banking reformers in the United States as a way of pacifying populist demands for easier credit and a more elastic money supply, but without sacrificing *laissez-faire* ideals or adherence to the gold standard. In the words of John Carlisle, Treasury Secretary under Grover Cleveland, the core idea was that the supply of money should be regulated not by the government, but by the "business interests of the people and the laws of trade."[2] Money, that is, would only be issued against loans that financed real commerce—not against speculative loans.

The dividing line between real and speculative was not always precise, but the general principle was clear: A real bill was a commercial loan that bridged short-term liquidity gaps between the production and final sale of goods. The loan was meant only to finance the carrying of goods to market, not longer-term capital investment or the purchase of financial instruments, both of which were considered to be inherently speculative. For example, a textile merchant might issue a $500 bill of exchange to purchase textiles from a manufacturer on credit in order to ship them abroad. The manufacturer could then present the bill to a banker, who would then purchase the bill at a discount—say $475. Since the banker discounted the bill by issuing notes or crediting a customer's deposit account, this would increase the supply of money.

[2] Quoted in Roger Lowenstein, *America's Bank: The Epic Struggle to Create the Federal Reserve* (New York: Penguin Books, 2016), 25.

Eventually, when the bill reached maturity (typically 90 days after issuance), the bank could present it to the merchant, who would repay the full $500 with the proceeds of the textile sales. Repayment of the loan would return bank notes to the bank, thus extinguishing the bank's liabilities and shrinking the money supply. Real bills are, in this sense, supposed to be "self-liquidating" since any money advanced to bridge temporary liquidity gaps should ultimately be repaid.[3]

Applied to central bank policy, the fundamental message of the real bills doctrine is that, by definition, money cannot be overissued unless it is being loaned out for speculative purposes.[4] For this reason, the Federal Reserve Act of 1913 makes no mention of regulating the quantity of money in circulation. The goal of the central bank was not stabilizing financial markets or macroeconomic conditions, but passively "accommodating commerce and business." The Fed was intended to facilitate the real economy, not politically intervene in it. At the same time, it had to ensure that it was accommodating *only* the real economy and not speculative bubbles in asset and commodity prices. The Act thus prohibits the discounting of any paper that does not arise "out of actual commercial transactions," including "notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities."[5]

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[3] This is what British Banking School economist John Fullarton called the "law of reflux." See Neil T. Skaggs, "John Fullarton's Law of Reflux and Central Bank Policy," *History of Political Economy* 23, no. 3 (September 1, 1991): 457–80.
[4] Thomas M. Humphrey, "Monetary Policy Frameworks and Indicators for the Federal Reserve in the 1920s," *FRB Richmond Economic Quarterly* 87, no. 1 (2001): 75.
[5] "Federal Reserve Act of 1913," Pub. L. No. 63–43, 7837 H.R. (1913), 14–16. As mentioned above, an exception was made for Treasury securities, but we will return to this point in the following section.

Here, in the Fed's founding charter, we can already see a basic dilemma. On one hand, the central bank is imagined as the steward of a supposedly autonomous market, passively providing as much credit as is demanded for "actual commercial transactions." On the other, it must exercise discretionary judgment in order to separate the "real" market from the "speculative." References to "orderly" markets first appear in the Federal Reserve's history as a way of marking off the boundaries of legitimate credit provision from the danger of speculative disorder. But from the beginning, it was not always clear where the line could be drawn.

Orderly Marketing

In an economy that was still largely agrarian, one of the most important roles of the early Fed was providing agricultural credit to smooth out seasonal fluctuations resulting from the harvest cycle. The Fed's formal mandate to "furnish an elastic currency" was, in large part, a response to the inadequacy of the earlier National Banking System, which prevented note circulation from adequately rising to accommodate the credit demands associated with the spring planting season and fall harvest.[6] Providing enough credit to ensure the "orderly marketing" of produce—the smooth transfer of commodities from producers to consumers, without shortages or gluts—would be a crucial, if contested, policy goal of the early Fed.

[6] Bruce Champ, "The National Banking System: A Brief History," Working Paper no. 07-23 (Cleveland, OH: Federal Reserve Bank of Cleveland, 2007), 14–15.

That the newly formed Federal Reserve concerned itself with orderly marketing at all was the legacy of decades of agitation from agrarian populists. In the late 19th century, lack of coordination among small farmers combined with the deflationary bias of the gold standard to produce a long-term trend toward excess supply and falling prices for staple agricultural commodities. In this period, populist groups like the Farmers' Alliance advocated for agricultural cooperatives as a way to restrict supply and guarantee farmers a remunerative income. The most ambitious cooperatives sought not only to manage aggregate supply, but also to issue their own credit notes against farmers' deposits of crops. The former would address the overproduction problem; the latter would counter the problem of scarce currency created by the gold standard.[7]

While this populist vision of agricultural cooperatives empowering small farmers with commodity-based credit never got off the ground, by the early 1920s, the idea that cooperatives could facilitate "orderly marketing," and prevent the collapse of prices in periodic gluts became well entrenched.[8] California cooperative organizer Aaron Sapiro, for instance, touted the "orderly marketing" framework as a

[7] Jonathan Levy, *Ages of American Capitalism: A History of the United States* (New York: Random House, 2021), chap. 10.

[8] See, for example, the discussion of orderly marketing in Ralph Roscoe Enfield, *The Agricultural Crisis, 1920-1923* (London: Longmans, Green and Co., 1924), chap. 4. During the congressional debates leading up to the Federal Reserve Act of 1913 Texas Democrat Robert Henry demanded that the monetary system should be based on agricultural assets (like warehouse receipts) rather than bank assets ("real bills"). This proposal, which drew on a long tradition of populist demands for farm credit (such as Charles W. Macune's Sub-Treasury plan), commanded substantial support among congressional Democrats and nearly succeeded in blocking the Glass-Owen bill that would later form the basis of the Federal Reserve Act. Lowenstein, *America's Bank*, 224–36; see also John D. Hicks, "The Sub-Treasury: A Forgotten Plan for the Relief of Agriculture," *The Mississippi Valley Historical Review* 15, no. 3 (1928): 355–73.

way to bring the managerial and disciplinary control of the industrial factory to agricultural production. In Sapiro's vision, growers would be organized on a massive scale. The cooperative would effectively monopolize the supply of the crop and homogenize it into a single pool by instituting standardized metrics for quality. Industrial processing techniques, such as canning and juicing, would then be applied to manage surpluses and stabilize market prices.[9]

If large-scale, industrialized cooperatives were starting to take responsibility for stabilizing agricultural prices through supply management, the extent to which the Federal Reserve would take responsibility for the monetary side of the equation was initially unclear. One of the earliest references to orderly marketing made by a Federal Reserve official occurs in a 1916 speech that Board member (and later Chair) William P.G. Harding delivered before the Birmingham Chamber of Commerce. In this speech, Harding responds to concerns from planters and merchants about excessive stockpiles of cotton that had been accumulated over the past year. The concern was that the sale of the existing supply, some 2 million bales, could lead to a collapse in prices, and, ultimately, bankruptcy for those stuck holding it. Harding acknowledged that prices would indeed collapse if the 2 million bales that had been accumulated were to be "thrown upon the market at once." He urged a "gradual and

[9] One of the earliest adopters of this model was the Sunkist citrus-growers' cooperative, founded in 1907. Julie A. Hogeland, "Managing Uncertainty and Expectations: The Strategic Response of U.S. Agricultural Cooperatives to Agricultural Industrialization," *Journal of Co-Operative Organization and Management* 3, no. 2 (2015): 63; Julie A. Hogeland, "The Economic Culture of U.S. Agricultural Cooperatives," *Culture & Agriculture* 28, no. 2 (2006): 68.

orderly marketing of the crop" instead of an "unseemly rush of cotton to the market."[10]

The 1920-21 Depression

By the early 1920s, it became clear that this kind of moral suasion from the Fed would not be enough to maintain order in agricultural markets. In 1920-21, a severe deflationary episode set in as both the Federal Government and the Federal Reserve attempted to rein in postwar inflationary pressures through a combination of fiscal austerity and monetary contraction.[11] The result was exactly the kind of price collapse that Harding described. As prices fell, farmers who had bought land on mortgage during a post-World War I period of inflation were faced with waves of foreclosures. Tenant farmers who could not pay rent were evicted. Confronted with a looming financial crisis, agricultural merchants and producers desperate to spare themselves from ruin dumped goods on the market at prices that were often lower than the cost of production. They also liquidated capital stocks (breeding herds, for example) at fire sale prices. Others withheld goods from the market in hopes that the prices might eventually recover enough for them to recoup their costs.[12]

The Federal Reserve had paid lip-service to the idea of agricultural price stabilization through orderly marketing, but when the 1920-21 crisis broke out, they

[10] Board of Governors of the Federal Reserve System, "The Present Cotton Situation," *Federal Reserve Bulletin* 2, no. 4 (April 1916): 163.
[11] Daniel Kuehn, "A Note on America's 1920–21 Depression as an Argument for Austerity," *Cambridge Journal of Economics* 36, no. 1 (2012): 156.
[12] Enfield, *The Agricultural Crisis, 1920-1923*, 120–21.

were initially unwilling to provide much more. Instead, the overriding concern was deflating prices and returning the U.S. dollar to the gold parity level that had applied prior to the postwar inflation. Convinced that "abnormal profits, high wages, and high prices of commodities" in the postwar economy had led to a "fictitious prosperity," Fed officials saw it as their moral duty to pour cold water on the "mania for speculation," end the "unprecedented orgy of extravagance," and return financial conditions to their "normal, or prewar, basis" (that is, the prewar gold parity).[13]

Fed officials claimed they were willing to support what they saw as orderly marketing of crops. But they saw an ever-present danger that credit intended to support orderly marketing would be used instead to finance the accumulation of stocks for the purpose of speculating on future price movements. As one Fed official explained in the early months of the depression,

> It is possible, as well as proper, for a Federal Reserve Bank to make the necessary advances for crop moving purposes, while it would be neither proper nor possible for it to furnish all the funds that might be necessary to withhold crops from the market, in order to force prices higher than might be considered natural. That is to say, higher than the prices which would obtain if the crops were marketed in a normal and natural manner and neither unduly held nor precipitantly sold … We have always felt that farmers, in the long run, would best serve their own interests by marketing with reasonable promptness sufficient of their crops to liquidate the agricultural advances obtained for raising them.[14]

[13] Board of Governors of the Federal Reserve System, "Seventh Annual Report of the Federal Reserve Board Covering Operations for the Year 1920," 1921, 1, 554. For a fascinating analysis of the connection between financial booms and the perceived dangers of unrestrained sexuality, see Jonathan Levy, "Primal Capital," *Critical Historical Studies* 6, no. 2 (2019): 161–93.
[14] Caldwell Hardy, "General Business and Agricultural Conditions in the Fifth Federal Reserve District for the Month of July, 1920," *Federal Reserve Bank of Richmond Economic Quarterly*, July 1920, 5.

Here we can see that the question of order is about determining a normative temporality for commercial activity. Goods should not be sold so fast that they are "thrown on the market all at once," as Harding put it, but neither should they be unduly withheld in hopes of future gain. Somewhere in the middle lay a "natural" price, grounded in real economic conditions of supply and demand rather than speculative market manipulation.

To the extent that the question of temporality was normative, it was also political. Indeed, the suggestion that unwarranted speculative withholding had anything to do with the crisis incensed farmers and their allies in Congress. The Fed, not the farmer, was to blame. Echoing William Jennings Bryan's famous "Cross of Gold" speech, one member of Congress accused the Fed of intentionally sabotaging the markets for agricultural commodities:

> You can "bear" the market or you can "bull" the market. The Federal reserve bank deliberately set out to "bear" the market. They succeeded so well that they broke the market—not only broke the market but broke the farmers as well. We there saw the strange spectacle of the farmer citizens of this country being ruined by being forced to sell their products on a glutted market, at less than what it cost to grow them, as a direct result of a policy adopted by their own Government … I say it was criminal, it was damnable for this all-powerful agency of our Government to deliberately crucify the farmers of this country.[15]

The Treasury was equally blamed for its failure to prevent the collapse in agricultural prices. In a statement given before the Joint Commission of Agricultural

[15] The quote is from Representative Phil D. Swing's congressional testimony on May 23, 1922. Quoted in Arthur S. Link, "The Federal Reserve Policy and the Agricultural Depression of 1920-1921," *Agricultural History* 20, no. 3 (1946): 169.

Inquiry, President of the American Cotton Association J.S. Wannamaker excoriated Treasury Secretary David F. Houston for his support for a "policy of drastic artificial deflation" and his narrow understanding of the meaning of orderly marketing. Describing his conversations with Houston, Wannamaker writes:

> He stated that the Government would take no action that would influence, directly or indirectly, the maintenance of the then existing prices … All efforts to gain relief, cooperation, or assistance from the Secretary of the Treasury failed, he taking the position that agricultural products should be marketed as soon as harvested; that orderly marketing meant immediate sales; that holding tended to interfere with orderly business and commerce; that the producers' business was to produce.[16]

These disputes bring the tension at the heart of the real bills doctrine into sharp focus. The purpose of the doctrine is to draw a line between credit provision to the real economy and credit provision for speculation. But this distinction is not, and cannot be, neutral or technical. Rather, as these debates show, it is thoroughly political. Each side justified its position by claiming that it was defending the integrity of the real economy against artificial financial conditions that distorted it. For the Fed and the Treasury, the postwar inflation was speculative and "fictitious." Therefore, a deflationary collapse was a necessary an inevitable correction, a return to "normal" conditions and economic fundamentals. As the president of the New York Fed, Benjamin Strong, put it, "No one could have stopped [the deflation], and no one could have started it. In our opinion, it was bound to come."[17] The deflation, in other

[16] Quoted in George W. Armstrong, *The Crime of '20: The Unpardonable Sin of "Frenzied Finance"* (E.G. Senter, 1922), 182–83.
[17] Quoted in Allan H. Meltzer, *A History of the Federal Reserve, Volume 1: 1913-1951* (Chicago: University of Chicago Press, 2004), 114.

words, was economic, not political. Conversely, for the agricultural lobby, the deflation was an "artificial" result of deliberate government policy—political and not economic. Notably, neither side recognized the irony of appealing to the autonomous laws of the market in order to justify *policy* positions that determined the price level. After all, there is no natural economic law dictating that prewar gold parity must be achieved or that a boom in commodity prices must continue indefinitely.

In the end, the resolution of the question was also a political compromise. Farmers were granted some fiscal relief through the War Finance Corporation while the Agricultural Credits Act of 1923 allowed the Fed to rediscount agricultural paper with a maturity of up to nine months, an extension of three months from what was allowed for agricultural notes in the original Fed charter.[18] Nine months is a far cry from the nineteenth-century version of the real bills doctrine, which typically limited discounts to maturities of 60 days or less.[19]

But the longer-term credit could still be justified within the orderly marketing framework. In an August 1923 press release, the Federal Reserve Board explained:

> The function of credit in the marketing of farm products is to finance the flow of products from the producer to the consumer in an orderly manner over the entire period of consumption. Products not immediately consumed are necessarily carried and financed at some point in the distributing process, and consequently require the use of storage and credit facilities. Credit can not [*sic*] create a market where none exists, but it can assist in adjusting the movement of products into the market at any given moment to the actual state of the demand, and thereby insure to the producer in so far as conditions will at all

[18] V.N. Valgren, "The Agricultural Credits Act of 1923," *The American Economic Review* 13, no. 3 (September 1923): 442–60.
[19] David Glasner, "The Real-Bills Doctrine in the Light of the Law of Reflux," *History of Political Economy* 24, no. 4 (1992): 885.

> permit of it a more settled price situation than he would face if his products were dumped upon the market as soon as harvested.[20]

A subtle, but important, change occurred here. The concept of orderly marketing was essentially the same as it was during the crisis, but now the emphasis had shifted from credit discipline (avoiding the speculative accumulation of commodity stocks) to credit ease (enhanced liquidity support to ensure a "settled price situation"). With the longer time horizon allowed by the Agricultural Credits Act of 1923, there was now more scope for the Federal Reserve to support the storage of goods until prices "settled." Still, the press release is careful to argue that providing more credit to the agricultural sector is essentially a passive act. It allows output to match the temporality of real consumption, to meet an already-existing "actual state of demand." But it does not have any substantive effect on the real economy—it does not "create a market where none exists."

This kind of reasoning neglects the fact that credit provision means income for farmers who would have lost their farm without it, which in turn means enhanced consumer demand. But it was the threat of speculative excess, not the endogeneity of demand, that remained Fed's primary concern. Its 1923 Annual Report contains long discussions of the potential for credit to be used "nonproductively" in ways that give rise to "unnecessary maladjustment between the volume of production and the volume of consumption" and consequent "disturbances" in the price level. The

[20] Board of Governors of the Federal Reserve System, "Statement for the Press, August 1, 1923," 1923, 6–7, x-3794, Mimeograph Letters and Statements of the Board, July-December 1923, Volume 19, https://fraser.stlouisfed.org/archival-collection/mimeograph-letters-statements-board-4957/july-december-1923-509987.

proposed solution is the use of discretionary judgment to prevent credit "from becoming either excessive or deficient."[21]

The idea that credit could be "excessive or deficient" was entirely foreign to the original real bills doctrine. This is because the real bills doctrine assumed that any credit issued against short-term commercial credit was, by definition, to be in proportion to the needs of the real economy.[22] What Fed officials had realized by 1923, however, was that even funds advanced on "real bills" could be used for speculation. As explained in the Annual Report, "A farmer's note may be offered for rediscount by a member bank when in fact the need for rediscounting has arisen because of extensions of credit by the member bank for speculative use." Worse still, even the farmer's note itself was not necessarily used to finance the orderly marketing of produce. It could instead be used to provide the farmer with the financial wherewithal to withhold goods from the market in expectation of a favorable price change. Such uses of credit that "impede or delay the forward movement of goods from producer to consumer" were contrary to the spirit of the Federal Reserve Act and had to be quashed. The problem, however, is that there were "no automatic devices or detectors for determining" the final uses of credit advanced by the central bank. What was needed was a closer surveillance of both member banks and market

[21] Board of Governors of the Federal Reserve System, "Tenth Annual Report of the Federal Reserve Board Covering Operations for the Year 1923," 1924, 34.
[22] See Humphrey, "Monetary Policy Frameworks."

conditions in order to decide when credit was spilling over the channels of the real economy into speculative mania.[23]

In order to constrain speculation and keep the financial economy in line with the real, the Fed would have to exercise more active, qualitative judgment about individual loans. It would, in short, need to become more substantively involved in private investment decisions. But the Fed, under the leadership of Benjamin Strong, ultimately went in a different direction. Strong believed that attempting to qualitatively regulate the uses that private member banks made of Federal Reserve credit was not only impossible, but also overstepped the boundaries of the Fed's mandate.[24] So rather than taking these steps, the Fed gradually began to move away from the real bills doctrine altogether. In the wake of the 1920-21 depression, the Federal Reserve started purchasing and selling of Treasury securities on a regular basis. By the beginning of the Great Depression, operations in the U.S. government security market had displaced market as the primary means of regulating credit conditions. The era of real bills had come to an end.

[23] Board of Governors of the Federal Reserve System, "Tenth Annual Report of the Federal Reserve Board Covering Operations for the Year 1923," 5, 34–35.
[24] Thomas M. Humphrey and Richard H. Timberlake, *Gold, the Real Bills Doctrine, and the Fed: Sources of Monetary Disorder, 1922-1938* (Washington DC: Cato Institute, 2019), chap. 7.

2. FROM ORDERLY MARKETING TO ORDERLY BOND MARKETS: THE RISE OF OPEN MARKET OPERATIONS

Promoting the orderly marketing of agricultural commodities was a policy goal that could be assimilated—if somewhat awkwardly—to the real bills ideal of a passive central bank responding to the demands of an autonomous real economy. The temporal mismatch between the supply and demand of agricultural goods was, after all, rooted in the natural rhythms of the harvest cycle and the metabolism of human consumption. But from the 1920s to the late 1930s, the agrarian concept of order was transplanted into an arena that, as far as the real bills doctrine was concerned, could not be further removed from the real economy: the market for sovereign debt. This chapter explores how the orderly markets concept was repurposed for the government securities market.

I begin by describing the historical contingencies that initially drove the Federal Reserve's interventions in the government securities market, known as "open market operations" today. Next, I explore the political fault lines and boundary struggles over the character of the U.S. monetary system during the early years of the Depression. As the economy entered a spiral of bank failures and deflation, popular demands for inflationary monetary experiments, particularly from farmers, drove a transition from a monetary system rooted in gold and commercial loans to one rooted in public debt. In the new fiat regime, the Federal Reserve's responsibility for the national currency became increasingly entangled with a responsibility for the government securities market.

The nature and scope of the Federal Reserve's responsibility for the secondary market in public debt was, from the beginning, a matter of political dispute—a question of reconciling the demands of a democratic state with the interests of financial markets. I trace how the Federal Reserve's understanding of its responsibility in the market was shaped by political pressures from all sides: popular protests, the U.S. Treasury, and, above all, the banking lobby. Federal Reserve officials initially expanded interventions in the government security market during the depression to preempt populist demands for direct government money creation in the form of greenbacks. During this period, expansionary open market operations (purchases of government securities in the secondary market) were advanced as a more politically palatable alternative to direct monetization of Treasury debt (purchases of securities directly from the Treasury) or direct government money issue (greenbacks).

The limitation of Federal Reserve operations to the secondary market in government debt (the "open market") was subsequently formalized in the Banking Act of 1935. I argue that the institutionalization of open market operations as the Fed's chief policy instrument marked a political compromise between the need to accommodate overwhelming popular demands to fight deflation, on one hand, and the imperative to maintain the infrastructural power of commercial banks and public creditors in the U.S. monetary system, on the other. The emphasis on working through the "open market" provided the legal and rhetorical foundation of this compromise.

Within the new paradigm of fiat money and open market operations established by the Banking Act of 1935, the stability of the secondary market for government debt took on pivotal importance in the overall stability of the monetary system. In the second half of the chapter, I analyze how the malleable concept of orderly markets became a guiding policy norm for the Fed's interventions in the government securities market. The notion that the government had a responsibility to maintain "fair and orderly" conditions in financial markets (as opposed to just commodity markets) emerged as a reaction to the stock market crash of 1929, eventually becoming cornerstone of the newly created Securities Exchange Commission's mandate. Analyzing the congressional debates leading up to the passage of the Securities Exchange Act of 1934 (which created the SEC), I show how the norm of orderly price movements depended on the construction of a malleable discursive division between speculation, on one hand, and economic fundamentals, on the other.

Finally, I consider the Federal Reserve's first attempts to stabilize the government securities market under the orderly markets rubric, during bond market panics in 1937 and 1939. Close readings of meeting minutes between the Federal Reserve's Board of Governors, the U.S. Treasury and the Federal Advisory Council (comprised of private commercial bankers formally representing the industry) reveal how orderly markets became a discursive terrain for constructing and negotiating the barriers between the Federal Reserve's support of market liquidity for Treasuries and monetization of the Federal debt.

Historical Origins of Open Market Operations

In 1913, the year that the Federal Reserve was founded, the market for sovereign debt hardly existed. Before World War I, issues of public debt had to be individually authorized by Congress to fund particular projects (the Panama Canal, for example). Consequently, new issues were sporadic, infrequent and modest. Of the debt that was issued—barely $1 billion was outstanding in 1913—the lion's share was in long-maturity bonds held by national banks as collateral for note issue. Very little was on offer for private buyers on any given day.[1] While the Federal Reserve Act of 1913 did grant the new central bank limited permission to deal in government securities, this was intended mainly as a means of retiring the older National Bank Notes, which were secured by Treasuries.[2] In contrast to the prior National Banking system, the new Federal Reserve System was expressly prohibited from using government securities as collateral for note issue. One of the chief purposes of the Federal Reserve Act, in fact, was to delink the money supply from the supply of sovereign debt.[3] Allowing money to expand with commercial loans and eliminating the use of government paper as collateral for currency, the Federal Reserve Act was meant to ensure that credit elasticity would not be constrained by the limitations of the United States' meager offerings of public debt.

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[1] Kenneth D. Garbade, *Birth of a Market: The U.S. Treasury Securities Market from the Great War to the Great Depression* (Cambridge, MA: MIT Press, 2012), 1–6.
[2] See Federal Reserve Act of 1913, sec. 18.
[3] Meltzer, *A History of the Federal Reserve, Volume 1*, 17, 66.

By the early 1920s, the Federal Reserve had already begun to depart from this vision. During this period, the Fed's deflationary policies dramatically increased the flow of gold into the United States. As member banks used increased gold balances to pay down their debts to the Federal Reserve—chiefly the short-term credit they accessed through the Fed's discount window—the Fed lost much of the income that it relied on to cover operating expenses. Regional Federal Reserve banks subsequently began buying government securities in hopes of replacing the lost discount window income. As soon as they began purchasing government securities in the open market, however, they found that the reserves generated by the purchase would be used by member banks to further pay down debts at the discount window. Any income received from interest payments on the government security would thus be canceled out by the interest lost on the discount window loan.

This led to the realization that the purchase of government securities could be more than a way to enhance operating income—it could be a tool for adjusting credit conditions. Even if securities were purchases from private individuals, and not directly from member banks, the money created by the purchase would find its way back into the banking system. Just as discount loans to banks enhanced the banking system's net reserve position, so too did securities purchases. Fed officials thus "discovered that the country's pool of credit is all one pool and money flows like water throughout the country."[4] Following this "discovery," the purchase and sale of government securities in the over-the-counter market—which came to be known as

[4] Burgess, "Reflections on the Early Development of Open Market Policy," 220.

open market operations (OMO)—gradually became the Fed's primary instrument for regulating credit conditions.

Used sparingly at first, OMO supplanted operations in private commercial credit as the Fed's chief policy device after the epochal financial crash of 1929. As financial panic gave way to economic depression, mass liquidations and a flight to safe assets (cash, gold and government securities) let to a collapse in the kind of private commercial lending that drove money issuance under the real bills doctrine. From 1929 to 1941, the market in bankers' acceptances (a form of negotiable short-term bank credit and the primary "real bill" that the Fed dealt in) all but disappeared.[5] At the same time, the demand for hard currency hit at an all-time high. Bank runs occurred as domestic depositors attempted to cash out their bank accounts. Foreign investors liquidated dollar assets and drained gold reserves. Trust in the financial system evaporated. This confluence of factors put significant strain on the Fed's gold position. The Federal Reserve Act of 1913 stipulated that outstanding currency (Federal Reserve Notes in circulation) had to be backed by collateral of either gold—a minimum of 40 percent—or eligible securities ("real bills"). The collapse in the acceptances market meant that the supply of eligible securities was shrinking at precisely the moment that demand for cash was snowballing. With fewer eligible securities, the Fed either needed more gold to back its note issue, or it needed to contract the money supply to match its gold holdings. With foreign investors

[5] David Marshall, "Origins of the Use of Treasury Debt in Open Market Operations: Lessons for the Present," *Economic Perspectives - Federal Reserve Bank of Chicago* 26, no. 1 (2002): 51.

demanding gold, however, attracting gold inflows would require dramatic interest rate increases that could only deepen the depression.[6]

This patently untenable position brought intense lobbying from both Fed officials and private bankers, who demanded that Congress amend the Federal Reserve Act to broaden the definition of eligible collateral for note issue.[7] The passage of the Banking Act of 1932 (better known as the Glass-Steagall Act) responded to this demand, authorizing the Fed to use Treasury securities as collateral for note issue for the first time in its existence. No longer constrained by the real bills doctrine, the central bank could now aggressively expand its open-market purchases beyond the private demand for commercial borrowing.[8]

As Figure 1 illustrates, the economic crises of the 1930s fundamentally changed the character of open market operations. On the eve of the stock market crash in 1929 the Fed held only 3% of Treasury debt outstanding, comprising less than 3% of its total balance sheet. By 1933, its holdings amounted to more than 10% of the total Treasuries market—more than 35% of its total balance sheet.[9] Money was

[6] Josephine McElhone, "Free Gold as a Constraint on Monetary Policy During the Early Stages of the Great Depression" (PhD diss., Iowa State University, 1970), 1–5, https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=5345&context=rtd.
[7] Gerald Epstein and Thomas Ferguson, "Monetary Policy, Loan Liquidation, and Industrial Conflict: The Federal Reserve and the Open Market Operations of 1932," *The Journal of Economic History* 44, no. 4 (1984): 964–67.
[8] Meltzer, *A History of the Federal Reserve, Volume 1*, 741–42.
[9] Data on the composition of the Federal Reserve's balance sheet compiled by Cecila Bao et al., "The Federal Reserve System's Weekly Balance Sheet Since 1914," Studies in Applied Economics (John Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise & Center for Financial Stability, July 2018), https://sites.krieger.jhu.edu/iae/files/2018/07/Federal-Reserve-Systems-Weekly-Balance-Sheet-Since-1914.pdf.

increasingly backed not by the real economic activity ostensibly underlying commercial loans, but by the debt issuance of a growing fiscal state.

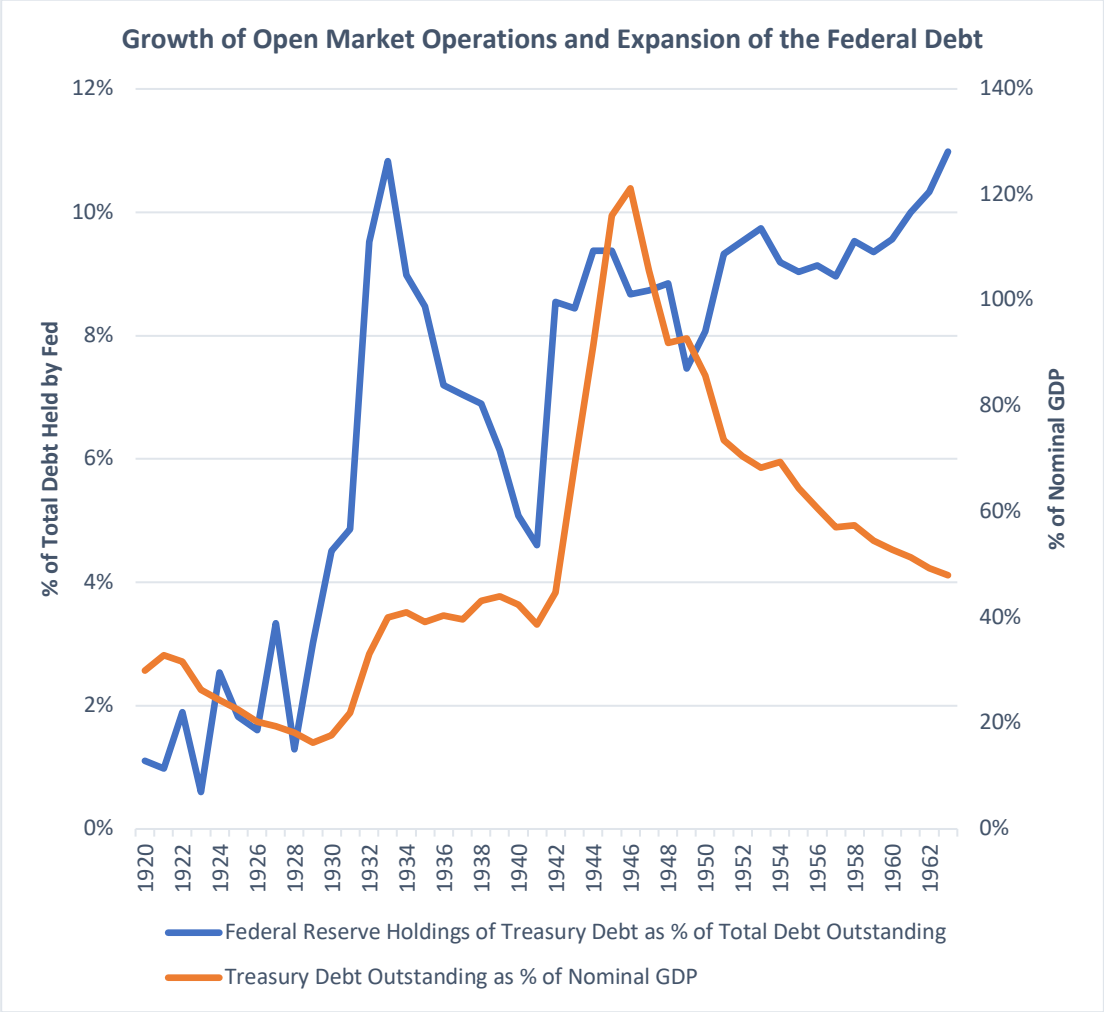

Figure 1: Growth of Open Market Operations and Expansion of the Federal Debt, 1920-1962

Sources: Annual Reports of the Federal Reserve Board of Governors, United States Treasury. Nominal GDP statistics after 1948 come from Bureau of Labor Statistics, nominal GDP estimates 1920-1948 come from Lewis Johnston and Samuel H. Williamson, "The Annual Real and Nominal GDP for the United States, 1789-Present." Economic History Services, April 2002. http://www.sscnet.ucla.edu/polisci/faculty/james/download/GDP.xls

The Great Depression and the Fight Against Greenbacks

In large part, the massive expansion in government debt holdings occurred against the will of Fed officials. While the Federal Reserve had initially joined bankers to lobby Congress for a change to its collateral requirements for note issue, Fed officials' enthusiasm for fiat currency and expansionary OMO only went so far. Even with bank runs and a deflationary financial collapse in the offing, the Fed was hesitant to embrace what it viewed as "inflationary" expansions of the money supply. The Fed embarked on a preliminary program of monetary expansion following the passage of the Glass-Steagall Act in 1932. But once it became clear that this expansion was seriously undermining the profitability of private bankers, the Fed reversed course, contracting its balance sheet, and contributing to a catastrophic financial collapse.[10]

As yet another cascade of bank failures and debt deflation rocked the country from 1932 to early 1933, pressure to reflate the economy mounted—particularly from agrarian interests. Farm states were hard hit by deflation. By 1933, agricultural prices had fallen to 50% of their pre-World War I level, leading to waves of foreclosures as farmers failed to make fixed mortgage payments. State legislatures under the control of agrarian interests responded by passing moratoria on foreclosures and other local measures, but none of these struck at the root of the problem: the vicious cycle of deflation and bank runs.[11] At a national level, protestors and politicians set their sight

[10] Epstein and Ferguson, "Monetary Policy, Loan Liquidation, and Industrial Conflict," 982.
[11] Barrie A. Wigmore, "Was the Bank Holiday of 1933 Caused by a Run on the Dollar?," *The Journal of Economic History* 47, no. 3 (1987): 742.

on currency reform. Devaluation of the dollar was debated in the U.S. Senate.[12] And, harkening back to a key proto-populist demand of the postbellum period, demonstrators marched in the streets demanded that the Federal Government print greenbacks (a non-convertible paper currency that was directly issued by the U.S. Treasury during the Civil War) to make whole farmers who faced losses from bank failures and debts that they could no longer repay.[13] The "weight of public opinion" said the *Wall Street Journal*, was "on the side of monetary experiments for the relief of debtors."[14]

President Roosevelt swiftly responded to the banking crisis—first by declaring a national bank holiday and, subsequently, by pursuing a series of emergency measures that, for all intents and purposes, turned the U.S. dollar into a fiat currency. In the first few months of Roosevelt's term in office, U.S. adherence to an international gold standard was temporarily suspended; the domestic convertibility of U.S. dollars into gold came to an end; and the contractual denomination of debt in terms of gold, rather than dollars, was outlawed.[15]

Meanwhile, an agrarian faction in Congress was mobilizing an even more aggressive fight against deflation. Congressional "inflationists," led by Senator Elmer Thomas of Oklahoma, introduced an amendment to the Farm Relief Bill in early 1933

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[12] Wigmore, 742–43.
[13] Associated Press, "4,000 Nebraskans March to Capitol," *New York Times*, February 17, 1933.
[14] "How Much Inflation?," *Wall Street Journal*, April 22, 1933.
[15] Lester Vernon Chandler, *American Monetary Policy, 1928-1941* (New York: Harper & Row, 1971), 272–74. International gold convertibility was restored at a reduced parity in 1934. The use of gold clauses in contracts, however, was not reinstated until 1977. Domestic convertibility into gold was never restored.

that would grant the President unprecedented monetary authority: Under the Thomas Amendment, the President could unilaterally reduce the gold content of the dollar by up to 50% and could instruct the Federal Reserve to purchase up to $3 billion in government securities directly from the Treasury. While the Fed was not legally required to comply, the President was empowered to bypass the central bank if it refused by retiring the same amount of debt with newly issued greenbacks.[16]

Roosevelt was open to monetary experiments to fight deflation, but in 1933 both he and his Treasury secretary, Henry Morgenthau, were firmly committed to balanced budgets and fiscal prudence.[17] Behind the scenes, Roosevelt pushed back on Thomas, worrying that the bill's explicit emphasis on money printing would be detrimental to the government's credit. Raymond Moley, another fiscal conservative adviser in Roosevelt's administration, ultimately pressured Thomas to delete a sentence from the bill stating that current federal expenses could be financed with new money issue.[18] Still, once Thomas agreed to excise the offending language, Roosevelt agreed to support the bill, with the greenback clause intact. Roosevelt recognized that the political pressure for inflation coming from Congress was too intense to ignore. While he would never exercise the greenback clause, after the

[16] Elmus Wicker, "Roosevelt's 1933 Monetary Experiment," *The Journal of American History* 57, no. 4 (1971): 867–70.
[17] See Julian E. Zelizer, "The Forgotten Legacy of the New Deal: Fiscal Conservatism and the Roosevelt Administration, 1933-1938," *Presidential Studies Quarterly* 30, no. 2 (2000): 332–59.
[18] Sebastian Edwards, *American Default: The Untold Story of FDR, the Supreme Court, and the Battle over Gold* (Princeton, New Jersey: Princeton University Press, 2018), 53.

Thomas Amendment was passed, "controlled inflation" would be his administration's new byword.[19]

Fed officials, for their part, remain opposed to such monetary expansion. Even so, they recognized that they could not allow the Roosevelt administration to issue greenbacks if the Fed was to maintain any meaningful control over monetary policy.[20] So in its April 1933 meeting, the Fed's Open Market Policy Conference (a precursor to the Federal Open Market Committee) resolved to purchase public debt in the secondary market in order to "meet Treasury requirements" and "support the market for government securities."[21]

Substantively, the outcome of this decision was not much different than allowing the Treasury to issue greenbacks to retire debt. In either case, money would be created and spent into circulation by removing Treasury debt from private balance sheets. It was also not much different from the Federal Reserve monetizing Treasury debt through the direct purchases that were also authorized by the Thomas bill. Indeed, Fed officials explicitly framed the authority to purchase government securities in the secondary market as a functionally equivalent alternative to purchasing directly from the Treasury.[22] The key difference here was that instead of

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[19] Edwards, 70.

[20] Governor George J. Seay of the Richmond Fed believed that the Thomas bill coerced the Federal Reserve System into supporting expansionary open market policy that it would not otherwise support: "I am quite positive that the [Open Market Policy] conference, or the majority of the conference, if not confronted with the [Thomas] inflation bill and if it did not have to choose between methods of inflation, would vote against the purchase of such an extraordinary amount [of $3 billion]. I do not call that preserving the independence of the Federal Reserve System." May 16, 1933 letter to W. Randolph Burgess, quoted in Chandler, *American Monetary Policy, 1928-1941*, 285.

[21] "Minutes of Meeting of the Open Market Policy Conference, Saturday April 22, 1933," 1933, 2.

[22] As was noted in the April OMPC meeting, the new authority to purchase billions in government securities "would permit the executive committee to purchase government securities in the market as a

direct monetization (which remained just one step removed from allowing the Treasury to issue greenbacks), the Fed would appear to be purchasing from the market. Before new issues of Treasury debt could make it onto the Fed's balance sheet, they would first have to pass through private hands. And if the Fed was successful enough in convincing private bondholders that the market would be supported, it might not have to provide much in the way of actual support. With their confidence buoyed by the Fed's commitment to support the market, private investment could take the place of Fed support. For this reason, the Fed only had to authorize up to $1 billion of bond purchases, compared to the $3 billion authorized by the Thomas Amendment.

Despite the functional equivalence of this operation with direct monetization, the optics were dramatically different. Direct purchases of Treasury debt made it look like the Fed was printing money to accommodate the political administration. Whatever followed from such purchases, it would appear that the government was the driving force, and therefore that the government was to blame.[23] Refracting monetary policy through a secondary market made the matter of political responsibility more obscure. Since private investors were the direct counterparties, money creation

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means of facilitating public issues of government securities rather than to force the Treasury to seek accommodation directly from the Federal reserve banks." "Minutes of Meeting of the Open Market Policy Conference, Saturday April 22, 1933," 2.

[23] Governor Seay unsuccessfully argued that the Federal Reserve should use this fact to place the responsibility for the anticipated inflationary fallout of government security purchases on the Treasury itself: "if the circumstances require us to purchase any large amount of government securities, we should buy them directly from the Treasury, and thus force the Treasury, in effect, to make us its direct instrumentality of expansion, or inflation, which of course is the purpose of the [Thomas] Act, and thus make the Treasury responsible for what might follow." Quoted in Chandler, *American Monetary Policy, 1928-1941*, 285.

appeared to emerge from the banking system, rather than directly from public spending. The Federal Reserve was "supporting the market" for government debt, not supporting the Treasury.

Equally decisive for Fed officials was the fact that supporting the market was a way to avoid the issue of greenbacks. As Fed officials explicitly acknowledged, "minimizing the risk of drastic methods of currency inflation, such as greenbacks" was the chief motivation for ongoing open market purchases of Treasury debt during 1933.[24] Avoiding greenbacks was crucial because they illustrated the political constitution of money in its purest form. Authorized by Congress and issued by the Treasury, greenbacks bypassed not only the Federal Reserve System (and its private member banks), but also any form of market mediation. They turned public spending into unmediated money creation. Even though the Thomas amendment merely allowed the retirement of debt with greenbacks (something that would be nearly indistinguishable from Federal Reserve open market operations in practical terms), the mere mention of greenbacks raised fears that the state would dismantle the monetary architecture that granted infrastructural power to public creditors and rooted money issuance in the market-mediated purchase and sale of assets. As one journalist

[24] The quote is excerpted from a memo summarizing a conversation between Governor Harrison and Governor Black concerning open market operations, which was circulated during a meeting of the FOMC executive committee. After the memo was read, there "ensued a general discussion in which those present all indicated general agreement with the view which Governor Harrison had expressed to Governor Black in the memorandum; namely that the committee saw no present need for further open market operations purely on the basis of monetary considerations." What counted was the political considerations: the appearance of cooperating with the Roosevelt Administration's recovery program and avoiding greenbacks. Executive Committee of the Federal Open Market Committee, "Minutes of the Meeting of the Executive Committee of the Federal Open Market Committee, September 21, 1933," September 21, 1933, 2.

noted shortly after the Thomas bill was passed, creditors were terrified of this prospect:

> Confronting revolution in its currency system, as this country is, it is no wonder that business interests and investors are moving in hesitant and haphazard fashion … To what extent the huge debtor class will succeed in revising the monetary system is the perplexing question that will keep the creditor class on the uneasy seat.[25]

In the Senate itself, the attitude of creditors was summed up by Virginia Senator Carter Glass, one of the architects of the original Federal Reserve Act and a longtime champion of the private banking industry.[26] When the Thomas Amendment was introduced in the Senate, he reportedly "read the bill with snorts of rage and rampaged off to the cloakroom muttering that it amounts to repudiation of the national debt."[27]

Outraged as creditor interests might have been about the inflationary provisions of the Thomas Amendment, however, the Federal Reserve's maneuvering managed to preserve their position of infrastructural power in the monetary system. More to the point, the Fed's support of the government securities market meant that prices would stay relatively steady, and holders of Treasury debt would be protected from capital loss. As it turned out, quotations for Treasuries went steadily *up* in late

[25] Earle E. Crowe, "Debtor Concessions Due," *Los Angeles Times*, April 22, 1933.
[26] Glass is usually remembered today as a reformer, especially since the legacy of the Glass-Steagall Act has been revived as a possible solution to financial instability in the wake of the 2007-9 crisis. But Glass was a true reactionary in many respects. Aside from being a rabid segregationist, he was a ruthlessly elitist defender of the powers and prerogatives of private finance. See Christopher W. Shaw, "The Politics of Elite Anxiety: Carter Glass and American Financial Policy," *The Historian* 82, no. 3 (2020): 308–27.
[27] "Vast Finance Inflation Sought in Senate Bill: Roosevelt Made Money Dictator in Measure Introduced by Thomas With White House Approval," *Los Angeles Times*, April 21, 1933, 2.

April and Early May—in spite of the inflationary program—largely because private investors expected the Fed to support bond prices with large open-market purchases.[28] Hardly a repudiation of the national debt.

The Banking Act of 1935

In the following years, the Federal Reserve Board's initially haphazard forays into the government security market became increasingly formalized. The Banking Act of 1933 created the Federal Open Market Committee (FOMC), which allowed for greater coordination of open market operations across the entire Federal Reserve System. Two years later, the Banking Act of 1935 gave the FOMC the organizational structure it has to this day. Much like the Federal Reserve's decision to support the market in 1933, the 1935 act was rooted in a compromise between a New Deal-era imperative for centralized economic policy and a political imperative protect the prerogatives of private finance.

The 1935 Act was the brainchild of Federal Reserve chair Marriner Eccles. In contrast to the decentralized structure of the early Fed—in which each regional Reserve Bank made independent policy decisions with only loose coordination and oversight from the Federal Reserve Board—Eccles envisioned a Board with the power to implement policy decisions across the System as a whole. The goal was

[28] "Federal Bonds Up Despite Inflation," *New York Times*, May 5, 1933, sec. Financial. Typically, one would expect inflation expectations to drive current bond prices down (and yields up). If the dollar is expected to be worth less in real terms in the future, bond investors will demand a higher rate of interest to compensate.

both to streamline the administration of monetary policy and to diminish the influence of the regional Reserve Banks, especially the Federal Reserve Bank of New York, in favor of a new Board of Governors consisting of political appointees. Since a portion of the board members for the Reserve Banks were elected by private member banks in each district, Eccles' proposal was meant to create a Federal Reserve that was more in line with the political administration and less influenced by bankers.[29]

Eccles' vision was challenged on two fronts. To his left, Treasury Secretary Henry Morgenthau Jr. favored outright nationalization of the Fed—the expropriation of the private banks that held equity shares in the Fed and the complete removal of private bankers from a position of influence on Federal policymaking. To his right, Eccles faced resolute opposition from Carter Glass, who wanted the "expert knowledge" of private bankers, not politicians, to govern open-market operations.[30] In its final passage, the Banking Act of 1935 struck a compromise between these two positions. It split seats on the FOMC between the politically appointed Board of Governors, who received 7 seats, and representatives of the Reserve Banks, who received 5 seats, on a rotating basis. At the same time, however, the 1935 Act eliminated the Secretary of the Treasury's position on the Board of Governors. Before 1935, the Treasury Secretary often had substantial direct influence on Federal Reserve policy, so this was a victory for Glass and his allies in the banking industry. Monetary governance would be increasingly centralized in the Board of Governors

[29] Peter Conti-Brown, *The Power and Independence of the Federal Reserve* (Princeton, NJ: Princeton University Press, 2016), 28–33.
[30] Mark F. Bernstein, "The Federal Open Market Committee and the Sharing of Governmental Power with Private Citizens," *Virginia Law Review*, 1989, 121–22.

and the FOMC, but the power of private bankers to influence open market policy would remain.

The Banking Act of 1935 Act also formalized the distinction between direct monetization of public debt and purchases in the secondary market. Under the 1935 Act, the FOMC would have discretion to decide on purchases and sales of Treasury securities, but such transactions could be made "only in the open market."[31] Contemporary observers saw the inclusion of this language as "one of the greatest, if not the greatest, victories gained by the Glass forces" in Congress and believed it would serve as a "safeguard against the danger of government financing itself by [issuing money]."[32] In practice, the Act provided no such safeguard. As explained above, the distinction between the Fed purchasing bonds directly from the Treasury and purchasing bonds on the "open market" is largely rhetorical. In both cases, the Treasury issues bonds that end up on the balance sheet of the Fed, and in both cases the quantity of reserves held by private banks increases. The only difference is that, in the latter case, the bond first goes to a private investor, who then resells it to the Fed.

Open market operations were not particularly *open*, either. The phrase "open market" evokes a competitive auction or an exchange, making continuously quoted prices available to a wide public. In reality, open-market operations were limited to an over-the-counter dealer market that, by the end of the 1930s, consisted of only eight recognized dealers (called "primary dealers" today), mostly based in New York.

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[31] "Banking Act of 1935," Pub. L. No. 74–305, 7617 H.R. (1935), 25.
[32] John Hanna, "The Banking Act of 1935," *Virginia Law Review* 22, no. 7 (1936): 775; A. D. Gayer, "The Banking Act of 1935," *The Quarterly Journal of Economics* 50, no. 1 (1935): 110.

This could have been otherwise. In the early 1920s, when the Fed was just beginning to operate in the Treasuries market, it briefly considered operating auctions open to the general public. But in the end, Fed officials decided to limit their business to what they deemed to be "responsible" dealers—those who had a large volume of business and were willing to make markets under all ordinary conditions.[33]

To summarize, if the phrase "open market operations" suggested that the centralized state fiscal apparatus would be held accountable by the anonymous and decentralized discipline of the market, the reality was quite different. Fiscal expansion financed by new issues of Treasury debt depended on negotiations between the Treasury, the Fed, and a small pool of primary dealers who were responsible for making the market. To the extent that all parties involved had an interest in ensuring the success of new Treasury issues and the continuity of the sovereign debt market, it would be a mistake to characterize this as a relationship of the market disciplining the state.

"Orderly" vs. "Pegged" Markets: The Vagaries of Liquidity Provision

If the Federal Reserve Act of 1913 envisioned a decentralized Federal Reserve passively accommodating the needs of commerce through the discount of real bills, the Banking Act of 1935 recognized the government securities market as the foundation of monetary policy. The more the Federal Reserve relied on the "open

[33] Kenneth Garbade, "The Early Years of the Primary Dealer System," Federal Reserve Bank of New York Staff Report, No. 777, 2016, 3–8.

market" to execute policy decisions, however, the more the stability of that market took on public significance. In this context, laissez-faire would not do. The need to ensure that markets in Treasury securities remained "orderly" became increasingly important. Between 1935 and outbreak of the Second World War, the Federal Reserve gradually developed an informal mandate to maintain orderly markets—which meant enough liquidity support to markets that price continuity would never be disrupted, and that sellers of Treasuries could always find buyers quickly and without significant risk of capital loss. This implicit liquidity guarantee turned Treasuries into a risk-free asset, the dominant "safe" investment vehicle in money markets.[34] At the same time, the Federal Reserve—and the private bankers who influenced it—was intensely concerned that orderly market policies would not undermine the *perception* that the price of government securities was set in the market. Orderly markets and liquidity support thus had to be distinguished from "pegged" markets and outright price support.

By 1935, the idea that an external, normative standard of order needed to be applied to price movements in securities markets was well-established. During the 1929 crash, J.P. Morgan Jr. and other major financiers attempted a private bailout of markets was that was explicitly aimed at "ensuring orderly trading conditions"—providing liquidity without attempting to prevent the overall decline in security prices.[35] Unlike the more famous bailout organized by J.P Morgan Sr. in 1907,

[34] For an excellent historical overview of the treatment of Government debt as a "safe asset," see Boy, "The Backstory of the Risk-Free Asset."
[35] "Bankers Mobilize for Buying Today," *New York Times*, October 29, 1929.

however, this attempt ultimately failed to prevent the ensuing depression. It was clear by the early 1930s that markets could not rely on the beneficence of a Morgan to halt a speculative asset price collapse.

This was a key factor leading to the passage of the Securities Exchange Act of 1934, which established the government's responsibility for ensuring "fair and orderly markets."[36] Recognizing that "manipulation and control" of security prices often gave rise to "excessive speculation, resulting in sudden and unreasonable fluctuations in the prices of securities," the Act endowed the newly created Securities and Exchange Commission (SEC) with the power to prohibit or constrain trading practices that resulted in "extraordinary market volatility."[37]

In practice, however, the meaning of this mandate was far from clear. What, after all, defined "extraordinary" volatility? At what point were price movements "sudden and unreasonable," as opposed to "orderly"? And what separated "speculative" investment motives from prudent ones? In the congressional hearings leading up to the Act's passage, these ambiguities came up again and again. Private financiers argued that practices perceived as speculation or price manipulation by the general public were, in fact, the very practices necessary for maintaining orderly markets. For example, the president of the New York Stock Exchange, Richard Whitney, defended the practice of short selling as absolutely necessary for

[36] "Securities Exchange Act of 1934," Pub. L. No. 73–291 (1934). The phrase "fair and orderly markets" appears 29 times in the text of the legislation.
[37] Securities Exchange Act of 1934, 3, 88.

maintaining order.[38] When a ban on short sales was briefly attempted, "crazy and dangerous price advances" developed as speculators were prohibited from entering the market to bet against continued price increases. "The ban on short selling," Whitney argued "could not be enforced for even two hours without creating an unnatural and dangerous market." Conversely, in a crisis of collapsing prices, "buying by short sellers would serve to maintain an orderly market" by ensuring that there were bids being made.[39]

At another point in the hearings, the investment banker Ronald M. Byrnes was questioned about the practice of buying back shares of a corporate bond issue that his bank, National City Co., had underwritten. When Senators questioned whether the effect of this practice was to inflate the credit rating of the company beyond what it was really worth, the Byrnes responded that he was not trying to "peg" the price at a particular level (that is, he was not trying to illegitimately manipulate the market to gain a favorable price), but he was simply maintaining an "orderly market,"—that is, "paying attention to our secondary markets … and really achieving distribution" by ensuring that demand never dried up.[40] Crucial to note here is that the only way to ensure "order," to "really achieve distribution," was to stabilize the market price—in effect, to manipulate the market so that price did not decline excessively. The

[38] Short selling is a practice that allows an investor to profit from a decline in the price of a security. The investor borrows a stock for a given time period, for example, resells the borrowed stock, and then buys it back to return to the lender of the security. If the price of the asset declines in the interim, the short seller makes a profit.
[39] "Stock Exchange Practices, Part 1," § Hearings before the Committee on Banking and Currency, U.S. Senate, 72nd Congress, 1st Session (1932), 186, 194.
[40] "Stock Exchange Practices, Part 6," § Hearings before the Committee on Banking and Currency, U.S. Senate, 72nd Congress, 1st Session (1933), 2311–13.

question of whether Byrnes was "pegging" the price or simply maintaining "order" was a matter of motivation, degree, and above all, narrative.

These exchanges show how malleable the discourse of orderly markets could be as a regulatory norm. Indeed, according to the legal scholar Caroline Bradley, the rubric of "fair and orderly markets" that underpins U.S. securities regulation has never been a coherent legal doctrine. It is selectively applied and more often than not, "market participants can use the rhetoric [of fair and orderly markets] to legitimate rules that may allow them to increase their market power."[41]

Unlike the S.E.C., the Federal Reserve never had a formal legal directive to maintain orderly markets. But as Treasury markets became the center of monetary policy, keeping a lid on speculative disorder became an increasingly significant informal mandate for the Fed.

Discussions of orderly government securities markets among Fed officials first arose early in 1935, a few months before the passage of the 1935 Banking Act. In February of that year, the FOMC voted to authorize $250 million in purchases or sales of Treasury securities. Concerned, however, that these large-scale open market purchases would create the appearance of market manipulation, the FOMC agreed that its purchases should not be used to stabilize prices, even if they were used to reduce volatility and cushion price movements. Acknowledging that the "government security market had become a dominating factor in the money market," the FOMC

[41] Caroline Bradley, "Disorderly Conduct: Day Traders and the Ideology of Fair and Orderly Markets," *Journal of Corporation Law* 26 (2000): 84.

discussed its new responsibility for the "status of the government security market." In the course of the discussion, "it was generally agreed that it was neither possible nor desirable to peg prices of government securities at any point, but that it might be desirable in certain conditions to ease movements in either direction."[42] Subsequent conversation clarified that, instead of setting prices, the authority to purchase or sell $250 million would be exercised "solely if necessary to avoid disorderly conditions in the bond market."[43] In other words, the Fed wanted to ensure that bond markets remained liquid, but they wanted that liquidity to be privately created. Some direct purchases might be necessary, but the goal was not for the Fed to make the market itself. Rather, the idea was to instill enough confidence in private dealers that *they* would continue make the market.

By January of 1937, the FOMC took this position to its logical conclusion, officially recognizing that the new structural significance of the government securities market in the private financial system gave the Federal Reserve an affirmative responsibility to maintain order:

> in addition to its operations to serve general credit policy, [the FOMC agreed that] the Reserve System had some responsibility for the maintenance of an orderly money market, and that in recent years the government security market had become so large a part of the money market that the general responsibility for the money market involves some measure of responsibility for avoiding disorderly conditions in the government security market, either on the up or down side [*sic*]. The view was expressed that it is the duty of the reserve system to

[42] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, February 5, 1935," 1935, 1–2.
[43] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, April 17, 1935," 1935, 2.

> determine at any period of weakness whether the market is sufficiently disorderly to justify intervention.[44]

The policy of maintaining order—that is, market liquidity—without supporting a particular price level was not as straightforward as it might sound, however. Whenever excessive price volatility appeared, the question would always arise of whether this was a result of speculative disorder or a result of fundamental forces in the real economy. As we saw in the debates leading up to the Securities Exchange Act discussed above, drawing this line between speculation and fundamentals was not a technical determination, but a matter of discretionary judgment and political pressure.

In the case of the government securities market, the rhetorical dividing line must be drawn between support of bond prices (enabling unlimited fiscal deficits), on one hand, and provision of adequate market liquidity to allow to the price mechanism to allocate investments among private investors, on the other. The task of drawing this line is complicated, however, by the fact that any measure of liquidity support to bond markets necessarily affects prices. In a "disorderly" market, a decline in bond prices leads market participants to expect further declines. This expectation makes bondholders want to sell at precisely the time that demand from buyers has evaporated, since buyers also expect further declines and do not want to buy until the market bottoms out. With no one willing to bid on bonds, the market vanishes. Bonds cannot be priced. In the most extreme case, the nominal wealth of bondholders collapses to zero. If the Fed steps in to purchase bonds at this point, it is, by

[44] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, January 26, 1937," 1937, 4.

definition, supporting bond prices by providing an external, non-zero anchor for price expectations that short-circuits the downward spiral of speculation. Since the evidence of market "disorder" is precipitous price decline, it is impossible to support liquidity without supporting prices and substantively changing market outcomes.

Justifying intervention by showing markets were "sufficiently disorderly" meant constructing narratives that showed price dynamics were based in speculative panic. Conversely, justifying non-intervention meant explaining price dynamics in terms of the real economy. In both cases, deliberations over which price movements were "real" and which were "speculative" themselves had material impacts on the distribution of wealth and the path of economic development. The determination of a disorderly market, grounded in a narrated relationship between price movements and real economic factors, was in this sense, fundamentally political.

Politicizing Market Order: The Bond Market Panics of 1937 and 1939

The first major political disputes around the orderly markets concept occurred during bond market panics in the spring of 1937 and fall of 1939. During this period, the question of whether government securities markets were disorderly reflected major political fault lines between private commercial bankers, Federal Reserve officials, and the U.S. Treasury. Bankers oscillated on orderly markets. They typically recognized the necessity of the Federal Reserve putting a floor on bond prices during market panics, but they also were concerned that temporary liquidity support would give way to longer-term expansionary policies. Such expansionary policies depress

interest rates, erode bank profits and potentially lead to a "pegged" government securities market, in which prices were set politically and no longer responded to the preferences of private investors in the banking industry. The U.S. Treasury for its part, pressured the Fed to expand its orderly market interventions. Preventing a collapse in bond prices and eliminating volatility to shore up the credit of the U.S. government were its main goals. Stuck between private bankers and the Treasury, the Federal Reserve attempted to justify policy decisions by narratively establishing the connection (or disconnection) between price movements in the government securities market and underlying economic fundamentals. A close examination of the disputes between the Federal Reserve, influential commercial bankers, and the U.S. Treasury over the meaning of orderly markets reveals the political forces that shaped narratives about the real economy

In the years immediately preceding the first bond market panic of 1937, signs of an uneven economic recovery from the depression had begun to appear. Though the unemployment rate was still nearly 17% in 1936, rising prices and output growth led many bankers and industrialists to declare that the depression had ended.[45] With deflation out of the picture, private bankers began to voice criticism of what they saw unnecessarily loose fiscal and monetary policy.

This was not because banks were necessarily opposed to Federal Reserve support for the government securities market. Indeed, the banking crises of the early

[45] Stanley Lebergott, "Labor Force, Employment, and Unemployment, 1929-30: Estimating Methods," *Monthly Labor Review* 67, no. 1 (1948): 51; "Depression at End, Says Ladd," *Wall Street Journal*, May 28, 1936; "Sees Labor Hired on Yearly Basis," *New York Times*, June 9, 1936, sec. Business.

1930s showed how important an asset Treasuries were for banks when private loans became too risky. Between 1929 and 1936, commercial banks shrank their loan volume to the public as they quadrupled their holdings of safe, liquid Treasury securities. To use the Keynesian term, banks shifted their "liquidity preference" in this period, preferring the security of lower-yielding assets that they knew could be liquidated without capital loss (at least as long as the bond market was orderly) to higher-yielding, but potentially illiquid, private loans. Bank credit expansion remained primarily in the form of expanded holdings of Treasury debt up until the end of 1936.[46]

With the perception of economic recovery, however, bankers started to become impatient with depressed profits and low yields. Pressure subsequently mounted for the Fed to reverse course on monetary ease. We see this most clearly in the meeting minutes of the Federal Advisory Council (FAC), a body comprised of representatives from the private banking industry that was established by the Federal Reserve Act to consult with and advise the Board of Governors.

In February 1936, the FAC delivered a recommendation to the Board. Years of expansionary open market operations (purchases of government securities) had created substantial excess reserve balances for commercial banks.[47] The FAC argued that these excess reserves were "a most serious menace" to the financial system, since

[46] Morris A. Copeland and Daniel H. Brill, "Banking Assets and the Money Supply since 1929," *Federal Reserve Bulletin* 34 (1948): 25–26.

[47] The term "excess reserves" refers to commercial banks' deposits in the Federal Reserve System (referred to as "reserves" or "reserve balances") that are in excess of reserve requirements. Commercial banks at this time were required to hold reserves equivalent to a specified percentage of their deposit liabilities as a way to limit leverage.

they allowed commercial bank lending to expand beyond what was required by real economic activity. Preventing commercial banks from using their excess reserve position to expand lending—potentially fueling inflation and eroding the real value of financial assets—was the FAC's main concern. The council was "deeply impressed with the necessity for prompt preventive action in order to avoid the possibility of the building of a credit structure on the reserves as at present constituted."

Of particular concern among the bankers was the fact that that reserve expansion was based on a "fiat element" that was inherently "unsound." As Councilmember J.H. Frost explained,

> The plain, undeniable truth is that $2,400,000,000.00 of this huge mass of reserves was created purely by open market purchases of Government bonds by the System … much of the reserve structure is not money at all, but is an unsecured promise of the Government to the identical extent that the United States notes, or greenbacks, were when they were issued during the Civil War.

The best course of action, he thought, would be for "bank reserves … to be purged of the fiat element before a bank deposit structure upon it becomes a reality, and thus insures its permanency." "The world history of currency and banking," Frost blustered, "has demonstrated the dangers inherent in such a system or policy too many times to make it necessary for them to be elaborated upon in this communication." Invoking the long tradition of the real bills doctrine, he went on to argue that a permanent monetization of the debt was contrary to the spirit of the original Federal Reserve Act. If congress knew that the FOMC were "substitut[ing] their judgment" for the "automatic function" of central bank rediscounting imagined

under Real Bills, they would likely revoke the Fed's power to engage in OMO.[48] Invoking the old real bills paradigm, Frost's diatribe illustrated the reflexive suspicion that bankers had toward the new fiat regime. Bankers initially found it difficult to distinguish between a regime that anchored money in the purchase and sale of government securities in the secondary market, and a regime that gave the U.S. Treasury direct political control over money issuance (greenbacks). Both represented potentially dangerous deviations from a monetary architecture rooted in commercial banks' discounting of real bills.

The Board of Governors was not entirely receptive to this kind of diatribe. The Board recognized that excess reserves were, by definition, idle funds that did not increase private loan volume or increase money in circulation. The fact that commercial banks had excess reserves against which they *could* expand their lending, did not mean that private loan demand would be adequate to fuel such an expansion. It was possible, then, that the FAC's assessment of the threat was exaggerated. There was also some concern among Board members that taking preemptive action to contract the banks' reserve positions (or increase reserve requirements) could pose an unnecessary threat to bond market stability and hinder economic recovery. If the screws were tightened on commercial banks' reserve position, a likely outcome would be that they would sell off Treasuries to meet reserve requirements, which might lead to a disorderly decline in bond prices.

[48] "Minutes of Meeting of the Federal Advisory Council, February 11-12, 1936," 1936, https://fraser.stlouisfed.org/title/minutes-recommendations-federal-advisory-council-1152/meeting-documents-february-11-12-1936-1825.

Despite these concerns, the Board internalized the FAC's overall criticism that excess reserves needed to be reduced. From August 1936 to May 1937, the Board voted to increase reserve requirements three times.[49] A gold sterilization program introduced by the Treasury—meant to prevent gold inflows from increasing money in circulation—compounded the tightening effect and prevented the increase of the monetary base by as much as 10% in 1937.[50]

Just as some of the Board members had worried, one result of these policies was to induce a disorderly price spiral in the government securities market. On March 12, major dealers and banks repeatedly refused to buy in anywhere near the quantity required, resulting in substantial price declines. A prolonged period of price volatility followed. Even if the increased reserve requirements didn't actually tighten money market conditions in the present (since they just eliminated excess reserves), private investors understood that the only reason for the Fed to engage in this policy in the first place was to restore its capacity to constrain credit in the future. According to the *New York Times*, investors felt that the Fed's reserve requirements increase was one of the main factors "responsible for the persistent weakness in Federal obligations, not so much because of heavy liquidation but from the lack of buying sentiment or ability on the part of the banks."[51] The Fed, for its part, denied that it had any intention of imposing constraint on credit conditions. On March 15, Chair Marriner

[49] Meltzer, *A History of the Federal Reserve, Volume 1*, 495–500.
[50] Douglas A. Irwin, "Gold Sterilization and the Recession of 1937-38," NBER Working Papers, no. 17595 (National Bureau of Economic Research, 2011).
[51] "Decline Resumed in Federal Bonds," *New York Times*, March 20, 1937; "Government Bond Turnover Largest in 16 Years Here as Prices Ease," *New York Times*, March 13, 1937.

Eccles issued press release aimed at "correct[ing] the erroneous interpretations" of the increased reserve requirements in the bond markets: "I have been and still am an advocate of easy money policy and expect to continue to be an advocate of such a policy as long as there are large numbers of people who are unable to find employment in private industry."[52]

While the Fed was publicly trying to calm markets with messages of monetary ease, internal divisions emerged about whether bond markets were truly "disorderly." In the wake of the panic, Treasury Secretary Morgenthau put the blame squarely on the Fed's reserve requirement increases and pressured the FOMC to increase its purchases of government securities. The FOMC resisted. George L. Harrison, the president of the New York Fed, led the opposition, enraging Morgenthau by refusing to call the bond market situation a "panic."[53] Chair Eccles was more sympathetic to the need to prevent disorderly markets, but agreed with Harrison that the collapse in bond prices was caused not by the Fed, but by underlying factors in the real economy. In the March 15 FOMC meeting, he argued that some shifting of securities in the Fed's account might be desirable to maintain orderly markets (for example, offsetting the purchase of longer-maturity notes with the sale of shorter maturity bills), but that the total size of the System portfolio should be increased "only as a last resort in an emergency." Echoing the concerns of the private bankers on the Federal Advisory

[52] Marriner S. Eccles, "Statement of Chair Eccles with Reference to His Position on Credit and Monetary Policies [Press Release], Box 92, Folder 6, Item 3," March 15, 1937, 1, Marriner S. Eccles Papers, https://fraser.stlouisfed.org/archival-collection/marriner-s-eccles-papers-1343/statement-chair-eccles-reference-position-credit-monetary-policies-press-release-460844.
[53] Meltzer, *A History of the Federal Reserve, Volume 1*, 510.

Council, Eccles warned that expanding the portfolio prematurely could be construed as being carried out "for the purpose of supporting the Government bond market." In other words, it could be seen as crossing the line from liquidity support to outright price support and debt monetization. Finally, suggesting that interest rates had been "permitted to fall too low," Eccles saw no reason that the Fed should support an artificial price level. If the Treasury wanted lower bond yields, it could not rely on the Federal Reserve to support prices politically. Rather it would have to deal with the underlying economic problem. The only solution was to "balance the budget and deal effectively with labor and armament problems which result in abnormal price increases."[54]

The main sources of disorder that Eccles identifies in this quote were excessive deficits associated with the New Deal, the export demand created by European rearmament programs, and a wage-price spiral driven by labor militancy. Rearmament programs, especially those of the United Kingdom, created a huge demand for U.S. iron, steel, machinery and shipbuilding during 1937. The massive upsurge in foreign orders contributed to domestic shortages of plant capacity, raw material and labor in these industries, generating inflationary price pressures.[55] At the same time, New Deal era labor legislation, particularly the Wagner Act of 1935, emboldened workers to take more aggressive action against employers, culminating

[54] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, March 15, 1937," 1937, 18–19.
[55] For a discussion of the impact of European rearmament on domestic industry and prices, see Board of Governors of the Federal Reserve System, "Review of the Month," *Federal Reserve Bulletin* 24, no. 6 (June 1938): 425–33.

in a wave of sit-down strikes starting in late 1936.[56] This exacerbated the inflationary pressures by disrupting attempts to expand production and meet foreign demand.

Eccles' primary political response in this situation was to denounce unions for demanding wage increases that outpaced productivity growth and for employing tactics that decreased output—especially factory occupations. Such tactics, he argued, resulted in selective price inflation that threw "the buying power of the various groups in the entire economy out of balance, working a particular hardship upon agriculture, the unorganized workers, the recipient of fixed incomes and all consumers." Still, he maintained that the Federal Reserve was "powerless" to correct this disorder unless these "non-monetary factors [were] brought into line either by private interests or by the Government."[57] George L. Harrison agreed the bond market dynamics were driven by these "non-monetary" factors. The decline in government security prices was an "understandable adjustment" to underlying conditions. It was not caused by the banking sector frantically selling off Treasuries in order to meet the higher reserve requirements, but by "the fact that corporations, trusts, and other investors were keeping out of the market because of talk of the possibility of price inflation, supplemented by labor troubles and world-wide armament programs, which resulted in a lack of bidders for the securities being offered."[58] Retrospectively, in its 1937 Annual Report, the Board of Governors reaffirmed this interpretation, noting

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[56] See Sidney Fine, "The General Motors Sit-Down Strike: A Re-Examination," *The American Historical Review* 70, no. 3 (1965): 691–713; Daniel Nelson, "Origins of the Sit-down Era: Worker Militancy and Innovation in the Rubber Industry, 1934–38," *Labor History* 23, no. 2 (1982): 198–225.
[57] Eccles, "Statement of Chair Eccles," 3–4.
[58] Executive Committee of the Federal Open Market Committee, "Minutes of the Meeting of the Executive Committee of the Federal Open Market Committee, March 22, 1937," March 22, 1937, 3–4.

that the "rate of advance in business activity [in early 1937] was in fact, so fast that there were evidences of unsound developments."[59]

Significantly, interpretive claims that tied price movements to the real economy in this dispute were grounded in discretionary decisions about what constituted a "normal" economic situation. In an effort to minimize purchases, the Fed made normative judgments that increased wage demands and labor militancy were "unsound developments" resulting in "abnormal price increases" while the panic in the bond market was an "understandable adjustment" to these conditions. In other words, some price movements were a legitimate expression of market sentiment, while others were an illegitimate result of unions' political attempts to restrict output. Equally important to note here is that, despite a clear link between the Fed's own action and the bond market troubles, Fed officials attempted to use the occasion to pressure the Government to balance the budget. It was not "bond vigilantes" that tried to rein in fiscal deficits, but the Fed itself.

In the end, however, the Fed was unsuccessful. Between the adoption of the Thomas Amendment in 1933 and the creation of the Exchange Stabilization Fund in 1934 (which authorized the Treasury to intervene in foreign exchange markets), the Treasury had considerable power over monetary policy. On April 3, Morgenthau leveraged this power, haranguing the FOMC about its inaction:

> You have been given by Congress this responsibility to look after the money market to keep an orderly market. You haven't done it. You have muffed it. Now I, Henry Morgenthau, Jr. speaking for the United

[59] Board of Governors of the Federal Reserve System, "Twenty-Fourth Annual Report of the Federal Reserve Board Covering Operations for the Year 1937," 1938, 2.

> States Government, serve notice on you that we expect you to do this, and we are going to give you one more chance. If you don't do it, then the United States Government, through the Treasury, will take over the entire responsibility. We are going to put this on to you now and give you one more chance.[60]

The next day the Fed voted to expand its balance sheet immediately, starting with $25 million that week, up to a total of $250 million by the beginning of May. Eccles supported the measure, but the rest of the FOMC, he said, went along with it only "on grounds of expediency, to avoid a break with the Treasury."[61] In the bond markets, the "selling mood … melted away," as dealers and buyers were reassured by the Fed's statement.[62]

If bond market conditions stabilized, labor market conditions did not. The combined impact of the Treasury's gold sterilization and the increased reserve requirements eventually led private banks to restrict loans and increase interest rates. A severe recession ensued. Between September 1937 and June 1938, industrial output contracted by 33% and unemployment dramatically increased.[63]

The FOMC denied responsibility for the slump, just as it had denied responsibility for the bond market instability earlier that year. When signs of the downturn first appeared, Vice President of the New York Fed, John H. Williams expressed a belief that "the slowing down of the rate of business activity was salutary in effect and had decreased substantially the possibility of any major disorders in the

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[60] Quoted in Sarah Binder and Mark Spindel, *The Myth of Independence: How Congress Governs the Federal Reserve* (Princeton: Princeton University Press, 2017), 130–31.
[61] Meltzer, *A History of the Federal Reserve, Volume 1*, 516.
[62] "U.S. Bonds Rise As Reserve Gives Buyers Confidence," *Wall Street Journal*, April 6, 1937.
[63] Kenneth D. Roose, "The Recession of 1937-38," *Journal of Political Economy* 56, no. 3 (1948): 241.

progress of business recovery."[64] Even as the recession deepened, he (like others on the FOMC) continued to maintain that its causes were "non-monetary" and called for an approach that combined fiscal austerity with encouragement of private investment. Williams supported continuing the policy of preventing disorderly bond markets, as necessary, but believed that direct fiscal measures to fight the recession (for example, through the sort of employment programs being introduced by Roosevelt at the time) should be avoided because they might "create an unstable banking and business situation and further uncertainty."[65] In short, some support for asset prices was necessary for orderly markets, but support for workers was unnecessary and could lead to "disorders" in the business recovery.

This line of thinking was deeply ideological. While there is no consensus among contemporary economists on the causes of the 1937-38 recession, recent scholarship (published by the Federal Reserve itself) has made a convincing case that monetary and fiscal tightening were the main causal factors contributing to the depth and severity of the recession while the increase in wages had little causal impact, if any.[66] Williams' contradictory interpretations of order thus were not based on a mechanistic model of the economy, but on power struggles over the price level. The Treasury wanted bond prices stabilized at low yields. Private bankers also wanted some measure of bond market stability, though as we have seen, they equally were

[64] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, June 9, 1937," 1937, 4.
[65] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, November 29 1937," 1937.
[66] Francois R. Velde, "The Recession of 1937: A Cautionary Tale," *Economic Perspectives - Federal Reserve Bank of Chicago* 33, no. 4 (2009): 34.

concerned that excessive Federal Reserve support for markets would keep rates too low: Low rates threatened bank profitability and potentially paving the way for a fiat regime that would leave bankers sidelined. No one who had the Fed's ear, however, wanted wages to increase at the expense of profit-share. For this reason, unemployment and the evaporation of demand for labor was seen as consistent with an orderly adjustment of market prices, but price volatility following the evaporation of demand for bonds was seen as disorderly.

By early 1939, economic growth had returned—and with it, pressure from bankers to tighten monetary conditions. The combination of the upswing in the domestic economy and gold inflows from European investors anxious about a looming war had again generated excess reserves and low interest rates.[67] With the bond market panic of 1937 in the rearview mirror, private member banks no longer felt that providing "a satisfactory market [in Treasuries] as to both amounts and prices" was a necessary service for the Federal Reserve to provide.[68] Bankers wanted protection against volatility in Treasuries markets when they faced liquidity constraints that might necessitate emergency liquidation of bond holdings. But when they were awash in excess reserves, they were more concerned about "abnormally" low interest rates depressing their profits than they were with orderly markets. Thus, with typical bombast, the private banks' representatives on the Federal Advisory Council once again issued a statement urging a reversal of monetary ease:

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[67] Meltzer, *A History of the Federal Reserve, Volume 1*, 546.
[68] "Minutes of Meeting of the Federal Advisory Council, February 12-14, 1939," 1939, https://fraser.stlouisfed.org/title/minutes-recommendations-federal-advisory-council-1152/meeting-documents-february-12-14-1939-1909.

> The Council believes that the "easy money" policy, through its failure to bring to the banks normal rates on their loans and investments, is tending to weaken the capital position of banks and is encouraging an essentially unhealthy position of the bond portfolios of the banking system through its inducement toward lengthened maturities at progressively lower rates. In addition, the Council believes that the operation of the "easy money" policy, by lessening the current cost of Government financing, has made the people, and even Congress itself, indifferent to the steadily mounting government debt and is tending to create illusions as to the eventual burden of carrying a constantly increasing debt … the time has come to face squarely the fact that the entire banking system is confronted with a distinct menace to the soundness of its capital structure through the continuation of an abnormally "easy money" policy. A prolongation of this situation threatens the existence of private banking and with it the whole system of private enterprise.[69]

If the Federal Advisory Council wanted the Fed to wind down its open market portfolio, eliminate excess reserves, and bring interest rates up, others at the Fed were ambivalent. Here again, the terms of the debate were defined by the distinction between artificial political policy and real economic conditions. Emanuel Goldenweiser, the Fed's research director, argued that low rates were not a result of "abnormal" policy decisions, but "fundamental conditions" that were out of the Fed's control: gold inflows from Europe caused by the prospect of war, lack of adequate outlets for domestic investment leading to excessive savings, and expansionary fiscal policy increasing the volume of deposits through sales of Treasury securities to banks.[70]

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[69] "Minutes of Meeting of the Federal Advisory Council, June 4-6, 1939," 1939, https://fraser.stlouisfed.org/title/minutes-recommendations-federal-advisory-council-1152/meeting-documents-june-4-6-1939-1771.

[70] Board of Governors of the Federal Reserve System, "Meeting Minutes, June 6, 1939 10:15AM," Minutes of the Board of Governors of the Federal Reserve System, 1939, 12.

It is arguable whether any of these factors was truly outside of the Fed's control, but the latter, in particular, was clearly the result of a policy choice. Federal deficit spending can indeed increase money circulation by converting inactive excess reserves into active deposits in consumers' accounts.[71] But if the Treasury's fiscal action had monetary effects, the Fed could have countered with contractionary policy. The issue was not that the "fundamentals" of the real economy were beyond the reach of the Fed. It was, as one banker on the Federal Advisory Council put it, that the Fed felt that *politically*, it no choice but to accommodate fiscal expansion with monetary expansion and low interest rates. Otherwise, "it was conceivable that Congress would have abolished it."[72]

Others on the FAC pointed out that, if anything, the problem was that the Fed might have too much, not too little, political influence over bond market conditions. "The market was very sensitive" to any signal that the Fed might be changing direction, so some of the bankers worried that any System bond sales might lead to a "panicky selling of Government securities by banks and other holders." Still, the general consensus was that the Fed would have to sell off some of its portfolio and initiate a price decline to restore bank profitability. The only reason bond prices kept rising, thought the bankers, was the fact that banks and dealers were speculating on a continued price rise. It was a purely speculative dynamic. If the Fed did nothing, it

[71] First, the Federal Government spends money, drawing down its balances in its bank account and increasing the balances of depositors who receive the Federal money. The Treasury then issues new debt at auction. Banks use their reserves (deposits held at the Federal Reserve) to buy the new Treasury debt, thus replenishing the Treasury's balance in its account, and diminishing their reserve position.
[72] Board of Governors of the Federal Reserve System, "Meeting Minutes, June 6, 1939 10:15AM," 19.

would be interpreted as an "indication that [the Fed] favors the continuation of the existing abnormal money market conditions." The modest capital loss that banks would incur from a fall in bond prices was outweighed by the need to restore bank profitability through higher interest rates. One of the bankers reminded the Board of Governors that they needed to balance their responsibility to the public interest and the elected government against their responsibility to "represent the interest of its member banks and use its influence with the Treasury and other Government agencies to place some slight and gradually applied brake to the existing trend toward easier money rates which threatens the long range solvency of the member banks."[73] Raising interest rates to restore bank profitability and pressure the government to impose fiscal austerity was the prescription.

In the short term, the bankers' position prevailed. Between June 21 and December 6, 1939, the Fed liquidated its $477 million portfolio of Treasury bills—close to 20% of its total open market account.[74] This was the first time the Fed shrank its net portfolio position since March 1933.[75] But the Fed's net sales were not nearly enough to absorb excess reserves. Rather than affecting interest rates by contracting the supply of reserves, the sales were directly aimed at reducing yields for the purpose of "contributing to orderly conditions in the market for United States Government obligations." The Fed now considered the maintenance of orderly

[73] Board of Governors of the Federal Reserve System, 15–20.
[74] Board of Governors of the Federal Reserve System, "Twenty-Sixth Annual Report of the Federal Reserve Board Covering Operations for the Year 1939," 1940, 4.
[75] Meltzer, *A History of the Federal Reserve, Volume 1*, 549.

conditions to be the primary purpose of open market operations.[76] But where pressure from the Treasury to stem panicky selling motivated the Federal Reserve's first "orderly market" intervention in 1937, this time around, pressure from bankers to stem a wave of "speculative" buying was the motivating factor.

When war broke out in Europe, however, the Federal Reserve was forced to reverse course. As the bond market rapidly declined in response to news of the war, System sales of bills were offset with purchases of long-term bonds to staunch the panic. At the beginning of September, the Fed purchased $473 million to maintain orderly conditions in the bond market.[77] While the huge volume of purchases was seen as a necessary response to an emergency, it raised new questions about what, exactly, it meant for the Fed to maintain "order" in the markets.

The FAC, in particular, was concerned that bond purchases aimed at restoring orderly conditions in the bond market were rigidly circumscribed. In early October, the Council issued new memorandum outlining its views the subject:

> While the Council fully recognizes the need in a grave emergency, such as that recently experienced, of taking steps designed to preserve an orderly market in Government securities, it also believes that the market price of Government bonds should be allowed to find its natural level, free of official intervention, as rapidly as possible consistent with an orderly market. The operations of the Open Market Committee, acting for the Federal Reserve banks, in maintaining an orderly natural market (as distinguished from a pegged market) should not be influenced by its judgment as to what the proper price level should be, but that level should be the result of general operations of willing normal buyers and sellers. Neither should it be influenced by

[76] Board of Governors of the Federal Reserve System, "Twenty-Sixth Annual Report of the Federal Reserve Board Covering Operations for the Year 1939," 9–10.
[77] Board of Governors of the Federal Reserve System, 7.

> any considerations of maintaining or extending the former policy of extremely easy money.[78]

The phrase "orderly natural market" encapsulates the essential conceptual tension in this memo. The classical liberal idea of market order is that the unconstrained and uncoordinated pursuit of gain by individuals in a competitive marketplace reveals a pattern of relative prices that optimally balances subjective preferences against objective scarcity. The order of prices, in this view, is a naturalistic product of markets. In contrast, the idea here is that order is not necessarily an endogenous product of market dynamics, but that it must be actively maintained by a government body. The question, then, is why an intervention to maintain order is deemed to be legitimate and consistent with the market price mechanism while "pegging" the market is not. Both interventions substantively influence prices; both prevent a collapse in prices that would have occurred if the Fed had decided not to intervene in the market at all. The difference is that the intervention to maintain orderly conditions is legitimated by an appeal to a "natural" price level. Where "pegging" is understood as setting prices according to a *political* judgment about a desirable price level, orderly markets interventions are grounded in an *economic* judgment about the price levels that real economic conditions would otherwise dictate, in the absence of purely nominal, speculative disturbances. If speculative disorder is imagined as exogenous to the market price mechanism, then Fed support can correct the disorder and restore the

[78] "Minutes of Meeting of the Federal Advisory Council, October 8-10, 1939," 1939, https://fraser.stlouisfed.org/title/minutes-recommendations-federal-advisory-council-1152/meeting-documents-october-8-10-1939-1828.

price level that *would have* applied in an imagined natural market. Still, in either case, interventions are a matter of articulating normative judgments about appropriate price levels. Neither case ultimately relies on an impersonal price mechanism that operates independently of subjective, discretionary judgment. Deciding where disorder ends and the "real" price mechanism begins is always a matter of discretionary judgment. It is always a matter of politics.

In the October 10th Board of Governors meeting convened a meeting with the FAC to discuss their orderly markets memo. In this meeting, the tension outlined above quickly bubbled to the surface. Vice Chair Ronald Ransom began the meeting by asking the Council to give their views as to what constituted an orderly market, so that the Board could better determine at what point a market should be declared disorderly. The question was how to determine the state of exception—at what point were price movements a reflection of fundamental changes and at what point were they a result of panic?

Several proposed definitions of disorder centered on the behavior of brokers and dealers. One banker on the Council defined an orderly market as one in which bids and offers were constantly quoted, where the spread between them did not widen too rapidly or excessively, and where a variety of private brokers and dealers made competing bids. A situation where one buyer or seller—namely, the Fed—single-handedly made the market was not normal. Another added that an orderly market was "one where the purchases and prices are determined by the free operation of the law of supply and demand which always includes willing buyers and willing sellers, not

people who are selling in a panic, and not sharks who attempt to buy when prices are very low." Echoing this definition, a third member said an orderly market should be "self-sustaining and free from panic."[79]

The dilemma, of course, was that the market could either be "freely operating" and "self-sustaining," on one hand, or it could be "free from panic" and "always include willing buyers and sellers," on the other. It could not be both at the same time. In fact, the market had evaporated in September 1939 largely because of rumors that the Federal Reserve was going to withdraw and allow it to "freely operate." Sketching an insider's view bond market panic, John Evans, president of the First National Bank of Denver, reported that

> He knew that one of the small country banks in his territory had been called on the telephone by one of the brokers in New York during the recent decline and advised that the Federal Reserve System was out of the market, that it was "swamped" with offers to sell and that it could not maintain the market any longer. He added that there was a panicky feeling when the Federal Reserve withdrew from the market.[80]

Evans later added that he believed brokers were "wildly making statements" about the Federal Reserve's withdrawal solely "to stir up selling and buying for commission purposes."[81] In this case, the very private brokers who were supposed to make the markets orderly by providing liquidity—the ones who were supposed to ensure that the market always included willing buyers and sellers—were in fact the ones inducing panic with wild speculations. Evans argued that it might have been preferable if

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[79] Board of Governors of the Federal Reserve System, "Meeting Minutes, October 10, 1939 10:30AM," Minutes of the Board of Governors of the Federal Reserve System, 1939, 14.
[80] Board of Governors of the Federal Reserve System, 4–5.
[81] Board of Governors of the Federal Reserve System, 11.

member banks were allowed to sell government securities directly to the Fed, rather than working through brokers and dealers. T.J. Davis, another member of the Advisory Council, concurred. The FOMC was a "bulwark of strength" during the crisis and "dissipated what might have been an overwhelming fear had there been no support in the market at all." "There was no reason," he thought, "why the dealers should be left alone to handle the market the way they want to." Rather it was up to the FOMC to "watch and take care of the market."[82]

What it meant to "take care of the market" was, once again, to draw a discursive line between the dynamics of financial speculation and the real economy. In the September 1939 panic, the Fed not only bought up bonds from dealers to prevent holdings from "hanging over the market, or from demoralizing the market further if the dealers attempted to liquidate them at once." It also required that dealers temporarily refrain from taking positions on their own accounts and disclose the names of clients on whose behalf they were selling. The idea was to discourage speculative short sales.[83] This action led to some controversy on the question of whether the Fed was merely discouraging speculation or restricting legitimate trading. While some Advisory Council members agreed with the idea that short selling and "raiding" (combining short sales with deliberate attempts to depress the relevant asset price) were inimical to orderly markets, others thought that the attempt to discourage sellers "does not create an orderly market because [it] artificially restrains some

[82] Board of Governors of the Federal Reserve System, 6.
[83] Board of Governors of the Federal Reserve System, "Twenty-Sixth Annual Report of the Federal Reserve Board Covering Operations for the Year 1939," 6,9.

selling that would otherwise take place, selling which is not panicky in a good many cases."[84]

Essentially, this is the same disagreement that came up repeatedly during the congressional hearings leading up to the Securities Exchange Act of 1934. One side points out that speculators generate instability by creating excessive price volatility; the other argues that maligning trades as "speculation" ignores the necessary service that the so-called speculators provide in maintaining a liquid market. In the case of the Fed, the dilemma is that, on one hand, providing liquidity support prevents markets from bottoming out as demand evaporates and private investors rush for the exit. On the other, it accommodates precisely the kind of "speculative" trading that was assumed to undermine orderly trading in the first place.

The problem, as John Maynard Keynes famously pointed out, is that liquidity support and speculative activity are thus two sides of the same coin. The only way to eliminate the type of speculative, self-referential investing that is focused on "anticipating what the average opinion expects the average opinion to be," is to make capital assets entirely illiquid—that is, to eliminate capital markets and require that investors to spend their money on a specific material capital good instead. Eliminating the liquidity of investments, however, would encourage prospective investors to hoard money. This is because the perceived liquidity of capital assets is part of what makes them a desirable alternative to stuffing cash in the proverbial

[84] Board of Governors of the Federal Reserve System, "Meeting Minutes, October 10, 1939 10:30AM," 4, 7.

mattress. What makes securities an attractive store of value, in other words, is that investors believe they will be able to liquidate their holdings and access their funds as needed.[85]

When it came to trading in Treasury bonds, this dilemma was particularly acute. Under the real bills doctrine, the policy goal was providing enough credit accommodation that goods could flow smoothly through the economy. What made marketing of goods orderly was that the temporality of marketing matched an observable feature of the real economy: the actual sale and consumption of wheat, cotton, and other commodities. This notion of order was not without its own problems, of course. (As discussed in the previous section, there was always uncertainty about whether commodities were being withheld from the market for speculative purposes.) But importing the agrarian concept of order to Treasury markets blurred the line between the real and speculative economy even further. Unlike agricultural loans, Treasury debt had no obvious relation to the production and consumption of material goods. What's more, agricultural paper was understood to be a "self-liquidating" bill—a type of credit whose volume would naturally ebb and flow with the harvest cycle. Treasury debt, in contrast, clearly flowed more than it ebbed. If the assumption after the First World War was that Federal debt should eventually be paid down, this idea appeared increasingly unrealistic in the 1930s. The debt had become permanent. So instead of *liquidation*, the goal now was to ensure that the debt

[85] John Maynard Keynes, *The General Theory of Employment, Interest, and Money* (London: Macmillan, 1967), chap. 16.

remained *liquid*. As long as treasuries functioned as a store of value with many of the qualities of money, they could be treated more or less as savings accounts for banks and institutional investors.[86]

It was hard to deny, however, that the safety and liquidity of Treasuries were not intimately tied to the Federal Reserve's guarantee of orderly markets. What made Treasuries a worthwhile investment (as opposed to, say, equities) was precisely that the secondary markets for them *were* guaranteed. Orderly markets meant Treasuries could always be sold without significant capital loss. In this sense, the Federal Reserve's liquidity support—its willingness to serve as market-maker of last resort—was the constitutive exception of the bond market. Most of the time it did not need to intervene, but the fact that it stood ready to do so once an "emergency" arose provided enough assurance that private dealers would remain willing to make the market the rest of the time. Rhetorical gestures to "underlying credit conditions" and economic "fundamentals" were not descriptive, but normative. Negotiating between the interests of private bankers and those of the Treasury, the Federal Reserve discursively established a norm for price behavior against which the exception would be defined. This discursive structure served to legitimate particular *policy* decisions about prices by framing these decisions as necessary for guaranteeing the price discovery mechanism of an otherwise "free" bond market.

[86] The idea that Treasuries function as a savings account is proposed by Stephanie Kelton in *The Deficit Myth*.

But for those on the inside, it remained clear that defining disorder was a political choice. Edward Ball of the Florida National Bank put it bluntly in the October Board of Governors meeting: "an orderly market was very simple … an orderly market was a market on which he was on the right side."[87]

[87] Board of Governors of the Federal Reserve System, "Meeting Minutes, October 10, 1939 10:30AM," 13.

3. PEGGED MARKETS: THE FED DURING WARTIME

The Federal Reserve's initial commitment to orderly markets came with a proviso that it would avoid any action that could be construed as supporting a particular pattern of Treasury yields. This did not last long. As the United States became more involved in the war effort, and finally entered the war itself, support of Treasury markets became more direct and explicit. Conversations about stabilizing interest rates began in early 1941, and by April 1942, the Fed had established a fixed yield curve (a set of interest rate pegs) that it would maintain for the duration of the war, starting at 0.375% for 13-week bills, up to 2.5% for 25-year bonds.[1] By 1943, it had effectively relinquished control over monetary policy; for the remainder of the war, the Fed, according to Marriner Eccles, "merely executed Treasury decisions."[2]

In the standard historiography, the pegged market in U.S. government securities represented the apex of "Treasury dominance," a period in which the fiscal policy of a democratically elected government left both private financial interests and the Federal Reserve "on the sidelines."[3] This chapter reveals another side of the story. The wartime peg was not the unilateral imposition of a dominant Treasury; rather, it was an unstable compromise position, a site of continuous boundary struggles over

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[1] Kenneth Garbade, "Managing the Treasury Yield Curve in the 1940s," Federal Reserve Bank of New York Staff Report, No. 913, 2020, 6–7.
[2] Marriner S. Eccles, *Beckoning Frontiers: Public and Personal Recollections* (New York: Knopf, 1951), 382.
[3] See, e.g., Meltzer, *A History of the Federal Reserve, Volume 1*, 11; Jack Rasmus, *Central Bankers at the End of Their Rope?: Monetary Policy and the Coming Depression* (Atlanta, GA: Clarity Press, 2017), 72–74; Gerald Epstein and Juliet Schor, "The Federal Reserve-Treasury Accord and the Construction of the Postwar Monetary Regime in the United States," *Social Concept*, 1995, 7.

the role of private banking in public finance. Even as the Federal Reserve relinquished control over monetary policy to accommodate Treasury's efforts to finance the war on relatively easy terms, Fed officials worked with the banking lobby to safeguard the central position of private banks in the U.S. monetary infrastructure and to protect the value of the financial sector's sovereign debt holdings against the perceived threat of repudiation in the postwar period. Bankers also worked with the Fed to ensure that their holdings of U.S. Treasuries would remain liquid throughout the war, against Treasury's preference for issuing illiquid debt. The Treasury was indeed dominant enough to overrule bankers' pressure for higher yields on government securities, but the banking lobby was equally successful in resisting attempts to radically overhaul the monetary system and diminish the power of private banks in public finance.

The financial sector's most significant victory is often overlooked: the fact that banks and other financial firms were permitted to accumulate interest-bearing war debt in the first place. Government securities became private banks' primary source of earnings over the course of the war, with Treasury obligations comprising 71% of their total assets by June of 1944 (up from 40% in June 1939).[4] Since the yields on Treasury securities were fixed, and the Federal Reserve guaranteed that they could be liquidated on demand, banks faced neither liquidity risk nor market risk on

[4] Marshall A. Robinson, "Federal Debt Management: Civil War, World War I, and World War II," *The American Economic Review* 45, no. 2 (1955): 398; Charles R Whittlesey, *Bank Liquidity and the War* (National Bureau of Economic Research, 1945), 84.

their holdings. As their balance sheets swelled with risk-free, government-guaranteed assets, banks' net earnings increased and return on equity nearly doubled.[5]

As we will see, this arrangement was far from inevitable. The Second War Powers Act of 1942 gave the Federal Reserve the right to buy government securities directly from the Treasury, bypassing the private financial sector. As populist critics of the banking industry like congressman Wright Patman pointed out, with these emergency powers in place, there was no necessary economic reason to allow banks to accumulate such large portfolios of Treasury securities. Interest paid on public debt became little more than a subsidy to private banks, keeping them afloat until the wartime emergency ended. For Patman and his allies, it seemed the Federal Government was delegating its sovereign right to issue currency to private bankers, and them paying them a fee for the privilege.

The Treasury, for its part, was either unwilling or unable to fully exercise its "dominant" position. At the outbreak of war, Treasury officials were deeply concerned with preserving the perception that the U.S. Government securities traded in a "natural" market, with yields determined by the free interplay of supply and demand. Even after the decision to peg the market was made, the Treasury believed the credibility of the war finance program depended in no small part on avoiding the perception that it had resorted to monetary financing. Treasury's ability to place debt

[5] Whittlesey, *Bank Liquidity and the War*, 85; John R. Walter, "The 3-6-3 Rule: An Urban Myth?," *FRB Richmond Economic Quarterly* 92, no. 1 (2006): 71. One could argue that the increased return on equity was more an effect of diminishing capital ratios (banks deposit liabilities expanded rapidly while their equity stakes did not). But given that their assets were risk-free and were essentially demand liabilities (since Treasuries could always be shifted to the Fed as needed), it would be difficult to argue that the arrangement did not benefit the banks, despite bankers' protestations to the contrary.

with the general public, rather than placing it with the Fed ("monetizing the debt") or worse, issuing greenbacks, was crucial for maintaining legitimacy. This was especially true in an environment where conservative financial columnists, economists, bankers and the Republican opposition were all taking every opportunity to criticize the Roosevelt administration's war finance effort. Accusations that Roosevelt was becoming "totalitarian" for deviating too far from the core American principles of free enterprise and private banking were common.

The Treasury, the Fed and the bankers all agreed that some form of interest rate stabilization was necessary during the war. All parties wanted to avoid the experience of European bond markets during the First World War, when declining bond prices led potential investors to continually defer purchases in the expectation of further declines.[6] For bankers, the speculative erosion of bond values could create balance sheet problems by forcing them to book substantial capital losses on their Treasury holdings. For the Treasury, rising interest rates could lead to a vicious cycle as the increasing costs of debt service were piled on top of real war expenditures.

The boundary struggles that emerged during the War, then, were less about the peg as such, and more about the political implications of the peg. Much as bankers profited from the accumulation of risk-free government securities, they worried that the suspension of anything resembling a market price mechanism would erode the institutional legitimacy of private banking. Banks' profitability was

[6] Barry Eichengreen and Peter Garber, "Before the Accord: U.S. Monetary-Financial Policy 1945-51," in *Financial Markets and Financial Crises*, ed. R. Glenn Hubbard (Chicago: University of Chicago Press, 1991), 180.

legitimated by the idea that they took on risk—that they were intermediaries between private savers and private borrowers, and that they were subject to market discipline like any other firm. To the extent that the peg made banks' role as monetary franchisees of the state (rather than merely private intermediaries) more conspicuous, banks could no longer explain their profits in these terms. So even as they supported and profited from the peg as a wartime expediency, they were anxious that it would lay bare the nature of the U.S. private-public monetary partnership. This could lead to inflationary debt repudiation at the war's end, or worse, the nationalization of private financial institutions. Struggles over the boundary between state and market in this period were about keeping that eventuality at bay.

Boundary Struggles in the Prelude to War: The 1940 Special Report to Congress

Following the bond market interventions of autumn 1939, described in the previous chapter, the Federal Reserve was politically squeezed—by the Federal Advisory Council on one side, and the Treasury on the other. Bankers on the FAC continued to pressure the Fed to renounce its "easy money" stance and to wind down its historically large portfolio of Treasury securities. Convinced that Federal deficit spending (largely on rearmament programs) had turned the Treasury into a proponent

of low rates and soft money,[7] the FAC wanted the Fed to tighten monetary conditions and reassert its customary role as "keeper of the government's financial conscience."[8]

The Treasury, for its part, did not have much need to overtly pressure the Fed to support the prevailing low rates. This was because international financial flows gave the Treasury all the support it needed. In 1940, the United States' trade surplus (resulting primarily from exports of war materiel) combined with the perceived safety of U.S. sovereign debt relative to that of Europe to bring substantial capital inflows.[9] By 1940, the United States held 80% of the world's total gold supply.[10] With these factors pushing Treasury yields down and contributing to an environment of extreme monetary ease, Treasury Secretary Henry Morgenthau could encourage the Fed's Board of Governors to "let the [government securities] market find its own level," knowing full well that a "market" level would mean near-zero bill rates and historically low rates on long-term bonds.[11] This made financing the war mobilization easy, but it depressed bank profits.

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[7] In May 1940, the FAC issued a memo to the Board of Governors arguing that the Fed's "easy money" policy was a result of "The unprecedented spending program of the Federal Government, which necessitated borrowing and inevitably induced the authorities to exercise their influence in the direction of keeping interest rates at a minimum. Deficit financing and official pressure for 'easy money' go hand in hand." Board of Governors of the Federal Reserve System, "Meeting Minutes, May 21, 1940, 11:20AM," 1940, 8–9.

[8] "Minutes of Meeting of the Federal Advisory Council, October 6-8, 1940," 1940, 10, https://fraser.stlouisfed.org/title/minutes-recommendations-federal-advisory-council-1152/meeting-documents-october-6-8-1940-1871.

[9] Eichengreen and Garber, "Before the Accord," 180.

[10] Mark Wayne Nelson, *Jumping the Abyss: Marriner S. Eccles and the New Deal, 1933-1940* (Salt Lake City: University of Utah Press, 2017), 348.

[11] John Morton Blum, *From the Morgenthau Diaries: Years of Urgency 1938-1941* (Houghton Mifflin: Boston, 1965), 298.

By autumn of 1940, the bankers were growing impatient. In October, the FAC issued a memo excoriating the Federal Reserve for its overly accommodative stance. Blaming the "persistent efforts of Government interventionism" for "abnormally low interest rates," the memo argued that such low rates were "certainly not a natural accompaniment of a situation where enormous Government deficits are piling up and more are frankly predicted." The implication here was that the "natural accompaniment" to the prospect of rising deficits was rising interest rates; only in a world where the "normal operations of economic laws are frustrated by one artificial device after another," would rates fall as budget deficits expanded.[12]

In other words, the FAC argued that it was a natural economic law for the Fed to respond to increasing deficits by tightening monetary conditions, but entirely "artificial" for the Fed and the Treasury to allow monetary conditions to ease in the face of international gold inflows.[13] Furthermore, the FAC saw no contradiction in calling for a resumption of the Treasury's gold sterilization program (which, as we saw in the previous chapter, contributed to a monetary contraction and recession in 1937). Gold sterilization was, of course, a prime example of a policy device designed to insulate the national economy from the effects of free international capital flows.[14] Some "artificial" devices, it would seem, were more palatable than others.

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[12] "Minutes of Meeting of the Federal Advisory Council, October 6-8, 1940," 6, 10.

[13] Today, most mainstream macroeconomics textbooks follow the bankers' lead in presenting the relationship between interest rates and deficits more as a mechanical law than a product of Fed policy decisions. See, e.g., Paul Krugman and Robin Wells, *Macroeconomics*, 4th ed. (New York: Worth, 2015), 288.

[14] Under the classical gold standard, the sterilization of gold inflows was considered the cardinal violation of the "rules of the game." Central banks were supposed to let international gold flows affect national monetary aggregates so that price levels and trade levels would adjust according to the "price-

This political struggle over interest rates and money market conditions—framed rhetorically as a struggle over the boundary between polity and economy—came to a head in early 1941. In December 1940, Marriner Eccles and other Federal Reserve officials sought to appease the FAC by agreeing to jointly draft special report to Congress.[15] While the report toned down much of the bankers' bombastic rhetoric, it embraced most of their core concerns. To deal with the problem of excess reserves and "unprecedentedly low" interest rates, it asked Congress to enhance the Fed's power to increase reserve requirements for member banks, to grant the Fed new powers to set reserve requirements for nonmember banks, and to enhance the FOMC's influence over gold sterilization policy. To address the bankers' apprehension about New Deal-era reforms that enhanced the executive branch's power over the country's monetary architecture, the report pushed Congress to revoke most of the powers it had granted the Roosevelt administration during the banking emergencies of the early 1930s. It recommended that Congress repeal the greenback clause in the Thomas bill and rescind the President's power to devalue the dollar and

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specie-flow" mechanism. In reality, central banks frequently departed from the idealized vision of automatic adjustment. Economic historians have found, for example, that the Bank of England tended to sterilize the effects of gold flows in the "classical" gold standard period of 1880-1914. Such research confirms Karl Polanyi's earlier argument that the vision of the gold standard as an automatic economic mechanism capable of subjecting states to an impersonal market discipline was essentially a utopian project of liberal ideologues. It was never realizable in practice because the costs of allowing the gold standard to operate unhindered would be too great for society to bear. See John Dutton, "The Bank of England and the Rules of the Game under the International Gold Standard: New Evidence," in *A Retrospective on the Classical Gold Standard, 1821-1931*, ed. Michael D. Bordo and Anna J. Schwartz (Chicago: University of Chicago Press, 1984); Polanyi, *The Great Transformation*.

[15] Board of Governors of the Federal Reserve System, "Special Report to the Congress by the Board of Governors of the Federal Reserve System, the Presidents of the Federal Reserve Banks, and the Federal Advisory Council" (Washington DC, December 31, 1940), https://fraser.stlouisfed.org/archival-collection/marriner-s-eccles-papers-1343/special-report-congress-466175.

monetize silver.[16] Finally, it asked Congress to grant the Federal Reserve a degree of control over the Exchange Stabilization Fund, a fund that was officially available to the Treasury for the purpose of stabilizing exchange rates, but which had long given the Treasury leverage over the Fed in the sphere of monetary policy.

Morgenthau was incensed by the report. In his diaries, he noted that the proposals were transparently aimed at stripping the White House and the Treasury of influence over national monetary and credit policy. On President Roosevelt's suggestion, however, he initially remained silent on the matter. "Henry," said Roosevelt on January 2, 1941, "this is so unimportant, the Federal Reserve System is so unimportant, nobody believes anything that Marriner Eccles says or pays any attention to him … The important thing is the war … Don't give the newspapers the satisfaction of getting into a row with him."[17]

But once interest rates on Treasury bonds started to rise sharply, Morgenthau could not help himself. In a January 9, 1940, press conference, Morgenthau stated that he was "disturbed" by the eroding bond values, as these could only have been a market reaction to the report. These drastic price declines, he argued, were not warranted by any underlying change in economic fundamentals, but solely driven by the Federal Reserve's political "interference with the market." "I have always favored a natural bond market, based on supply and demand," Morgenthau said. "I don't know of any demand for money which causes such a sharp rise in interest rates … I

[16] "The [Presidential] power to further devalue the dollar in terms of gold is no longer necessary or desirable and should be permitted to lapse." Board of Governors of the Federal Reserve System, 2.
[17] Quoted in Blum, *From the Morgenthau Diaries: Years of Urgency 1938-1941*, 298.

don't believe in taking artificial means to raise rates at this time. By artificial I mean legislative means." Interventions aimed at the maintenance of orderly market conditions—where the Federal Reserve "act[ed] as a cushion" in the market—were legitimate, Morgenthau thought. But tanking the bond market through this kind of legislative proposal amounted to intentional market manipulation. Asked by a correspondent whether he thought the Federal Reserve's proposal was "an attempt to take control of the money market from the government and give it to the New York Bankers," the Secretary mused, "It raises an interesting thought."[18]

In addition to the bond market disturbance, the release of the FAC-Federal Reserve report caused some commotion in Congress. Utah Senator William H. King commended the Fed's and the FAC's position, calling the New Deal-era presidential powers over money a "sword of Damocles hanging over the financial system." Several other senators endorsed the report as well.[19] But despite the initial flurry, Roosevelt and Morgenthau managed to quash the plan. The bond market recovered after Morgenthau's press conference. And by February, the *New York Times* reported that the proposals outlined in the report had been "silently dropped into the waste-basket."[20] The *Wall Street Journal*, always a reliable weathervane for creditor sentiment, lamented that the Fed's reform program was scrapped. The American public was apparently too "diverted by demagogues, anesthetized by propaganda,

[18] "Morgenthau Hits Drop in U.S. Bonds," *New York Times*, January 10, 1941, sec. Financial.
[19] Nicholas P. Gregory, "End of Roosevelt's Power Over Dollar Proposed by Federal Reserve System In Program to Avert Defense Inflation," *New York Herald Tribune*, January 2, 1941.
[20] Arthur Krock, "In The Nation: For the Eccles Proposals, the Scrap-Basket," *New York Times*, February 21, 1941.

prejudices and boredom" to show concern for the "frightening" condition of the federal finances.[21] Defeated, the Federal Reserve retreated, maintaining a neutral policy stance (no sales or purchases) until the Japanese attack on Pearl Harbor.[22]

Pearl Harbor and the Road to the Peg

If Fed officials were amenable to the FAC's demands for stringency during the early period of mobilization, the balance of forces shifted dramatically when Pearl Harbor was bombed on December 7, 1941. Within 24 hours of the attack, the Federal Reserve issued a press release making it clear that acting as the Government's "financial conscience" was no longer on the table. On the contrary, it would prioritize the Treasury's needs for the duration of the war:

> The System is prepared to use its powers to assure that an ample supply of funds is available at all times for financing the war effort and to exert its influence toward maintaining conditions in the United States Government security market that are satisfactory from the standpoint of the Government's requirements.[23]

With the United States headed for war with Japan, the banks could hardly argue with the Fed's whatever-it-takes messaging. On the same day, the New York State Bankers' Association telegrammed Treasury Secretary Morgenthau saying they stood ready "to do everything possible to aid you in mobilizing this country's financial resources against this infamous attack … We await your orders."[24]

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[21] Frank R. Kent, "The Great Game of Politics: The Scrapped Plan," *Wall Street Journal*, February 18, 1941.
[22] Meltzer, *A History of the Federal Reserve, Volume 1*, 557.
[23] Press release dated December 8, 1941, quoted in Board of Governors of the Federal Reserve System, "Federal Reserve Bulletin" 18, no. 1 (January 1942): 2.
[24] "Bankers Expect No Disturbances," *New York Times*, December 9, 1941.

Still, private bankers expected that cooperation would be a two-way street. As a group of leading Wall Street financiers—convened as the General Consultative Committee to the Federal Reserve—explained, "no serious disturbances in our market are to be anticipated as a result of the Japanese attack." Because of the structural importance of the government securities markets to "the national interest and the credit and banking position," it was well understood that "the monetary and credit authorities were able and ready to take care of them, so as to prevent disorderly trading or unwarranted declines in prices."[25]

Morgenthau, for his part, was initially eager to broadcast the message that the bond markets did not need support. On the day after the attack, he told the press that market performance was "natural" and unsupported. But his assurances that "American patriotism and common sense" would keep prices steady and make support unnecessary fell flat.[26] Bond prices broke and on December 9, the Fed and Treasury launched joint purchases for the third time since the war in Europe began, with the Fed adding roughly $70 million of Treasury securities to its balance sheet over the course of the month.[27]

The interventions were still publicly framed in terms of orderly markets.[28] But in private discussions, Fed officials had, for some time, been losing faith that periodic discretionary purchases to stave off disorder would be enough to meet the fiscal

[25] "Bankers Expect No Disturbances."
[26] "Morgenthau's Big Job," *Wall Street Journal*, December 9, 1941.
[27] Whittlesey, *Bank Liquidity and the War*, 45.
[28] See, e.g. Morgenthau's December 11th statement to the press. "To Maintain Orderly Market," *New York Times*, December 12, 1941.

emergency. Well before the Pearl Harbor attack, Fed Research Director Emanuel Goldenweiser noted at an FOMC meeting that the idea of orderly markets "implied an underlying conception of a natural market, a conception which … did not accord with conditions as they exist today." "Orderly market policy," he continued, was "out of line with reality." Even with inflationary pressure, the increasing scale of the debt meant that interest rates could not be allowed to rise because "it would increase the cost of government borrowing … [and] raise serious problems about the decline in the capital value of outstanding securities." With government securities comprising an ever-larger proportion of bank balance sheets, a substantial rise in yields (a decline in prices) would lead to capital losses that could threaten the stability of the banking system. Goldenweiser therefore proposed that the Fed abandon orderly markets policy and instead stabilize long-term rates at a periodically revised level.[29]

Others on the FOMC were hesitant about Goldenweiser's suggestion. FRBNY Vice President Williams, for instance, thought the System should emphatically avoid any action that would make it appear that the government security market had continuous support. Explicit support, Williams said, would "cast doubt upon the public credit."[30]

The Treasury shared Williams concern that an explicit "rigged rate" policy might undermine public confidence, and preferred, as least initially, to maintain a

[29] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, September 27, 1941," 1941, 6–7.
[30] Federal Open Market Committee, 10.

"natural" market for government securities.[31] Important to note, however, is that the concern was only to avoid the *appearance* of continuous support rather than the reality. In discussions with the Fed during late 1941 and early 1942, Treasury officials made it clear that they wanted low interest rates actively maintained. And they supported Goldenweiser's idea of stabilizing the long rate at 2.5%. But they wanted this goal accomplished through expansive open-market operations and the maintenance of excess reserves rather than any explicit, publicized target for a pattern of rates.[32]

To understand why the Treasury would be anxious to avoid the appearance of "rigging" the market—even as it pushed the Fed to accomplish substantively the same goal through open market operations—requires an understanding of the bond market as a discursive construct as much as an institutional reality. Maintaining the public perception that decentralized markets determined the price of public debt was, it would seem, an important propaganda goal for Morgenthau's Treasury, as it helped to draw a line between American free enterprise and Nazi totalitarianism.

In the run-up to the war, the popular press had been vigorously scrutinizing Nazi Germany for signs that its fiscal capacity had been depleted. By 1939, U.S. journalists triumphantly reported that "the German money market's power of absorption is exhausted as far as state loans are concerned."[33] And as the Nazi regime

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[31] The quotes are from Treasury Undersecretary Daniel A. Bell, September 8, 1941. Quoted in Elmus R. Wicker, "The World War II Policy of Fixing a Pattern of Interest Rates," *The Journal of Finance* 24, no. 3 (1969): 449.
[32] Wicker, 452.
[33] Sigrid Schultz, "Hitler to Use Tax I.O.U.'s to Pay Nazi Debts: Germans Fear Concealed Form of Inflation.," *Chicago Daily Tribune*, March 25, 1939. See also Otto D. Tolischus, "Reich 'Prosperity'

subjected its banking sector and money markets to progressively tighter control, conservative commentators in the United States attempted to discredit the Roosevelt administration's fiscal policy by comparing it to Hitler's. In both cases, state control over money and capital markets resulted in an "abnormal diversion of funds to the public treasury."[34]

This line of criticism was enough to make the Treasury reticent about efforts to stabilize the government securities market. Nevertheless, it was not long before the exigencies of war mobilization pushed the Fed and the Treasury to adopt a comprehensive stabilization program. By April 1942, Fed and Treasury officials had agreed to maintain a 2.5% ceiling on long-dated bonds through the standard mechanism of open market purchases. Further, in a stark departure from Fed tradition, they also agreed that the Fed would "post" a 13-week bill rate of 0.375%. This meant that, rather than stabilizing rates through discretionary purchases and sales in the open market, it would make a standing offer to buy or sell Treasury bills in an unlimited quantity at the posted rate.

Private bankers had, by this point, resigned themselves to the necessity of stabilization. A draft report issued in March 1942 by the Economic Policy Commission of the American Bankers Association pointed out that any significant fluctuation in the price of government securities could potentially wipe out bank

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Financed by State: 'German Miracle,' Achieved in Defiance of Sound Economics," *New York Times*, September 1, 1937.

[34] Wesley Smith, "The March of Finance: Similarity in Trends and Reaction of New Deal and Nazi Capital Market Control Measures Shown," *Los Angeles Times*, September 8, 1940, sec. Financial. On public finance in Nazi Germany, see Otto Nathan, *Nazi War Finance and Banking* (New York: National Bureau of Economic Research, 1944).

capital and "interfere with the maintenance of a broad and active market." The report concluded that there was a "need for financing the war on a fairly steady level of interest rates." The idea of an explicit fixed peg remained controversial, however. While the report was clear that limiting price volatility was necessary to avoid a "general market collapse," it argued that if "investors can be induced into the market at slightly higher rates … [then] there seems no inherent reason why those rates should not be allowed to adjust themselves to the more desirable level." For one example, the report cited corporate investors, who were generally only interested in the most liquid money market instruments. The Treasury had not been issuing the kind of securities that would meet this demand. The yield on bills was too low to make them worthwhile for corporate treasurers, and the supply was too low. Raising bill yields to 0.5% and increasing their supply, the report argued, would ensure that "this market will no longer be starved and corporations can fill their needs."[35]

The question of the appropriate pegged bill rate proved to be a thorny one. Before the Fed and Treasury agreed on a posted 0.375% rate, the newly appointed FRBNY President Allan Sproul had been pushing for significantly higher rates, recommending that the Treasury should place bill rates between 0.5% and 0.75%, and issue $200 million worth of bills weekly. Sproul's demands for higher rates were framed not in economic terms, but in the normative terms of fairness. The pattern of rates, he argued, must be "fair to the Treasury as regards the cost of borrowing, …

[35] "Treasury War Borrowing and the Banks: Draft Report by the Economic Policy Commission of the American Bankers Association and the Fiscal Policy Committee of the Reserve City Bankers Association" (New York: American Bankers Association, March 1942), 12–20, https://fraser.stlouisfed.org/files/docs/historical/eccles/025_07_0006.pdf.

fair to the market in the sense of providing a living return to investors, and … should also be deemed fair by the market."[36] Determining an interest rate in terms of "fairness" is a far cry from the prewar idea that the Fed should not substitute its own judgment for the judgment of markets. Presumably, this is why Sproul includes the disclaimer that the rate should also be "deemed fair by the market."

The aporia here is that if the Fed and Treasury were really looking for rates that would be *deemed* fair by the market, then they could simply let the market set the rates. After all, the entire theoretical justification for allowing markets to set interest rates is that markets are supposed to aggregate individual subjective preferences about which rates are acceptable in any given circumstance and reveal an equilibrium rate that optimally balances those preferences. No reference to any individual's normative criterion of fairness is required. But as Fed vice chair Ransom forcefully put it, "it is impossible to have a free market in Government securities during a war period … the Treasury and not the market should determine at what rate the war will be financed."[37]

Even as references to market pricing remained in the discussion as a normative standard, the actual fixing of rates came down to explicit political bargaining. In fact, Sproul's proposal for rates that would be "fair" to the market were considerably *higher* than the actual market rate prevailing at the time of 0.25%.[38]

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[36] Leroy M. Piser, "Memorandum to the Board of Governors," December 22, 1941, 1, https://fraser.stlouisfed.org/archival-collection/marriner-s-eccles-papers-1343/memorandum-board-governors-465576.
[37] Piser, 2.
[38] Wicker, "The World War II Policy of Fixing a Pattern of Interest Rates," 450.

Much like the American Bankers Association, Sproul believed "fairness" meant tailoring Treasury issues to produce a return that corporate investors would find satisfactory—not to mention bankers themselves, who were the primary holders of Treasury bills. Despite the total mobilization for war, and the rhetoric of wartime sacrifice emerging as a public ethos, bankers still complained that they were being "bled white" by low interest rates.[39]

The Second War Powers Act

Around the same time that the Federal Reserve and the Treasury were negotiating over the terms of the wartime interest rate peg, Congress moved to dramatically revise the terms of the monetary settlement that had been established in the Banking Act of 1935. On March 27, 1942, Congress passed the Second War Powers Act, which removed the requirement introduced in the 1935 Act stipulating that the Federal Reserve could purchase government securities only "in the open market."[40] Now regional reserve banks could purchase securities directly from the Treasury, without any requirement that the Treasury first place its debt with private dealers.

The Second War Powers Act lent greater urgency to the normative question of what constituted a fair return to bankers and investors in government debt.

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[39] A member of the FAC made the complaint about bankers being "bled white" in the April 9, 1942 meeting of the Board of Governors. Quoted in Meltzer, *A History of the Federal Reserve, Volume 1*, 602.
[40] Meltzer, 594–98.

Authorizing the Federal Reserve to buy government securities directly from the Treasury meant that, if the Fed agreed, the Treasury did not have to pay any interest at all. As Marriner Eccles put it, the Fed's resources for purchasing government securities were "practically unlimited."[41] If it chose to, it could simply purchase the entire war debt at zero percent interest. In this sense, the War Powers Act made it clear that the decision of where to set interest rates, and how much of the public debt to place with private banks, corporations and the public, was a policy decision. There was no guarantee that major money market investors would get a say in where rates should land.

For this reason, the War Powers Act was denounced by bankers and establishment economists alike. The conservative Economists' National Committee on Monetary Policy, led by Princeton Economist Edwin Kemmerer, wrote that the Act "removes all obstructions to a rapid and direct monetization of the Federal debt by the banks … precisely the path taken by Germany which led her into runaway inflation and the collapse of 1932."[42] More dramatically, former president of the American Bankers Association Orval W. Adams declared that "No greater threat to the savings and earning power of the people had ever been uttered."[43]

[41] "Direct Bond Deals Urged For Reserve," *New York Times*, February 5, 1942.
[42] "Economists Score Eccles Bond Plan," *New York Times*, February 9, 1942, sec. Business.
[43] "Bond Buying Plan Decried: Inflation Threat Seen in Direct Government Lien Purchases," *Los Angeles Times*, February 18, 1942.

Private Monetization: Excess Reserves and War Loan Deposit Accounts

Invoking the specter of inflation to criticize the War Powers Act was essentially opportunistic: it was a convenient argument to legitimate the bankers real concern that direct monetization of the debt would erode their infrastructural power in the monetary system. In fact, as Marriner Eccles repeatedly pointed out, it was no more inflationary for the Federal Reserve to buy public debt directly from the Treasury than it was for private commercial banks to buy it.

Understanding this point requires some explanation of how the financing of World War II differed from the picture of government fiscal policy presented in economics textbooks. Economics textbooks typically present the purchase and sale of government debt (fiscal policy) as analytically distinct from changes in the money supply (monetary policy). If the supply of loanable funds available in the market (the "money supply") is fixed, then as the government issues more debt, it will create greater market pressure. The government's credit demand will compete with private credit demand for a fixed pool of loanable funds. Government borrowing can thus lead to higher interest rates, and "crowd out" private investment. This textbook picture is wrong for several reasons, but it is particularly inapplicable to the sale of government securities to commercial banks during World War II.

For the "crowding out" story to work in this context, two conditions would have to apply: (1) the quantity of reserves held by commercial banks would have to be fixed independently of the Treasury's debt issuance, and (2) commercial banks could not be holding reserves in excess of their reserve requirements. If conditions (1)

and (2) both held, then a commercial bank purchasing a Treasury bond would be pressured to contract its private lending in proportion to its purchase of public debt. The bank would use its reserve balances to purchase the bond from the Treasury, causing its reserve position to drop below the statutory requirement. It would then need to borrow to meet its reserve requirement, either from other banks in the interbank market, or from the Federal Reserve's discount window. Such borrowing would put greater pressure on the bank's bottom line, which would either put upward pressure on the interest rates it offered on private loans or push the bank to contract its private loan portfolio to offset its expanded public loan portfolio and thereby meet its reserve requirements.

This picture does not match the institutional reality of the World War II financial system, however. Neither condition applied. Condition (1) did not apply because the Federal Reserve coordinated its advances and purchases with new Treasury issues, ensuring that reserves expanded to accommodate any commercial bank purchases of new public debt.[44] Condition (2) did not apply because the banking system had built up substantial excess reserves throughout the 1930s. Since commercial banks purchased Treasury securities with excess reserves, such purchases simply resulted in the swap of non-interest-bearing reserve balances for interest-bearing Treasury debt. Without the pressure generated from the bank's reserve position falling below its reserve requirement, there was no mechanism connecting this asset swap to private bank lending. So even as bank credit expansion was

[44] Robinson, "Federal Debt Management," 396.

restricted by direct credit controls, reserve requirements and the supply of high-powered money (the reserve balances banks held in their accounts at the Fed) played no role in constraining new loans.[45]

Even as excess reserves dwindled during 1942 and 1943 (making condition 2 closer to the reality), this dynamic remained in place, because the use of so-called War Loan Deposit Accounts gave qualifying private commercial banks essentially unlimited authority to monetize public debt themselves.

War Loan Accounts were first established to enlist U.S. commercial bank support for the financing of World War I.[46] The first Liberty Loan Act of 1917 authorized the Treasury to open deposit accounts (called "war loan accounts") at select commercial banks (called "special depositaries"). Under the terms of the Liberty Loan Act, commercial banks that qualified as special depositaries could subscribe to a Liberty Loan offering by crediting deposits to the war loan account that the bank itself managed. In short, the Act allowed private banks to "fund" Treasury borrowing with their own deposit liabilities—their own IOUs.

Initially, because war loan deposits were exempted from reserve requirements, this amounted to an implicit subsidy for banks. Banks created the deposits necessary to purchase the bond out of thin air, at no expense to themselves. Only once the Treasury actually needed to spend the credits would the war loan account be drawn down. As Treasury spending was received by firms and individuals, the funds would

[45] Whittlesey, *Bank Liquidity and the War*, 82.
[46] The following historical sketch is adapted from "Annual Report of the Secretary of the Treasury on the State of the Finances for the Fiscal Year Ended June 30, 1955" (Washington DC: U.S. Government Printing Office, 1955), 277–78.

be transferred back into individual deposit accounts against which reserves were required. But in the meantime, banks would receive interest payments on the Liberty bonds at no expense to themselves. In return for this subsidy, the Treasury received what amounted to a free underwriting service for its bonds. (Commercial banks could profit by buying up Liberty bonds with war loan account credits and then reselling them to retail customers as the Treasury drew down its war loan account balances.)

Another important rationale for the use of these accounts was the idea that they would help mitigate financial instability. If the massive expansion in Treasury receipts and disbursements during the war were allowed to affect money market conditions without any kind of padding (the "crowding out" effect described in the "textbook" picture above), financial markets would be roiled with volatility.[47] Management of balances in war loan deposit accounts could keep Treasury operations from introducing this kind of volatility.

During the 1930s, war loan accounts largely fell into disuse. Interest rates on Treasury securities were low throughout the decade. And in 1935, reserve requirements were reimposed on deposits balances in them. The combination of low rates and reserve requirements made the accounts far less attractive to banks. When the United States entered the Second World War in the 1940s, however, war loan accounts rapidly became one of the primary methods of financing the war effort. On April 13, 1943, Congress passed a bill that temporarily exempted the War Loan

[47] "Tax and Loan Accounts: Government Balances Managed To Avoid Upsetting Money Markets...," *Federal Reserve Bank of Dallas Business Review*, November 1973, 7–9.

Deposit Accounts from FDIC assessments and reserve requirements.[48] This removed any obstacle to commercial banks monetizing the Federal debt, giving commercial banks the ability to mint deposit liabilities for underwriting Treasury debt at no immediate cost and subject to no limitation from the Federal Reserve.

Despite all these measures that blurred the lines between public debt monetization, driven by the Federal Reserve, and private debt monetization, driven by the commercial banks, critics of wartime fiscal policy consistently framed debt monetization as a problem of *government* rather than one that intimately involved the private banking sector. The next section shows how this simplified framing played out in public debates over the terms of wartime Treasury issues.

The October 1942 Treasury Issue

The public response to the Treasury's October 1942 debt issue offers a clear example of how concerns about debt monetization were selectively—and perhaps cynically—mobilized to bolster the infrastructural power of bankers and bond investors. This was possible only by eliding the problem of private monetization and shifting the focus to the danger of public monetization, embodied most vividly in the image of the greenback.

By autumn of 1942, the Federal Reserve had been maintaining the pegged yield curve for months. Since the Treasury stopped the Fed from making clear and

[48] See Board of Governors of the Federal Reserve System, "Thirtieth Annual Report of the Federal Reserve Board Covering Operations for the Year 1943," 1944, 86.

unambiguous announcements about its intention to maintain this policy, however—likely for fear that it would invite comparisons to the fascist enemy—many commercial banks were either unaware of the peg, or uncertain about how long it would be maintained. So when the Treasury announced a new issue of nine-year, 2% bonds in 1942, subscriptions were weaker than expected.[49] If subscribers had been aware of the peg, and confident that it would persist, the 2% nine-year bonds should have been a fantastic deal, since the yield-curve maintained by the Fed guaranteed bondholders a capital gain as the 2% nine-year certificate approached the 1.5% yield of four-year securities.[50] On the other hand, banks and dealers had long been accustomed to Treasury issues being underpriced to ensure that there would be a substantial oversubscription and the Treasury would not be embarrassed by a failed issue. With the Second War Powers Act, this was no longer necessary. Now that the Fed was authorized to directly underwrite Treasury debt, it could make the market without depending on private dealers to ensure that the flotation was a success. So, in a break from past practice, the Treasury offered the 2% issue at par.

Bankers, institutional investors, and their defenders in the financial press were not impressed. *TIME* magazine accused Treasury Secretary Morgenthau of a "customers be damned" approach to war finance, arguing that he and his New Deal colleagues like Eccles were callously indifferent to the needs of the banks:

> They are quite sure that the banks will continue to take Government offerings, at almost any price, and that they do not have to worry about

[49] Wicker, "The World War II Policy of Fixing a Pattern of Interest Rates," 456.
[50] Paul A. Samuelson, "The Turn of the Screw," *The American Economic Review* 35, no. 4 (1945): 674.

> giving the banks what they want. Their attitude is: This is war; the banks have to buy our offerings, they have no choice, nor any other way of earning a living.

The article went on to acknowledge that sales to commercial banks (what I call private monetization) could be inflationary. Nonetheless it argued that selling bonds directly to the central bank is far worse because it was "the next thing to printing greenbacks." If Morgenthau was going to keep "trying to fight a war boom as if trying to fight a depression," he'd "find that either he has to take control over the entire credit system of the nation or add to the inflationary fires."[51]

Infuriated by these accusations, Eccles wrote to the *TIME* editors, explaining that there was no reason for bonds to be offered at a price that would invite oversubscription during wartime. Such underpricing only yielded a "speculative opportunity for a quick turnover at a profit" rather than substantively helping to control inflation.[52] (Earlier in the year, Eccles had employed similar rhetoric in defense of the Second War Powers Act, asserting that the only ones opposed to it were "a few big banks" and bond dealers who "want no purchases or sales except those that go through the market so that the commissions can be taken off").[53] He also excoriated the *TIME* editors for "implying that selling Government securities to a central bank is disastrous to the economy, whereas selling them to the commercial banks would not be. The fact of the matter is that the same amount of new money

[51] "Greatest Flop Since Mellon," *TIME Magazine* 40, no. 17 (October 26, 1942): 85–86.
[52] Marriner S. Eccles, "Letter to Henry Morgenthau, Jr., Box 10, Folder 6, Item 12," Marriner S. Eccles Papers, October 27, 1942, https://fraser.stlouisfed.org/archival-collection/marriner-s-eccles-papers-1343/letter-henry-morgenthau-jr-465088.
[53] "Direct Bond Deals Urged."

would be created in either case." Finally, Eccles cited a letter to customers issued by Chicago bond dealers Wayne Hummer and Co., praising the "stability and orderliness" of the bond market since Pearl Harbor, and noting that

> This orderliness … was fatal to the activities of that group who believe that the Government bond market is a legitimate place for security speculation and that Government bond prices should be in a continual state of ferment in order that their speculative activities could proceed as usual.

Contradicting the *TIME* article, the letter from Hummer and Co. insisted on the need for continued price stability in the government securities market since a "program of ever-higher coupons" would threaten to wipe out commercial banks' already diminishing capital.[54]

Eccles insistence that price stability and par issues ought to be enough for non-speculative investors was not enough to persuade dealers, however. It ultimately took a guarantee from the Treasury that the FOMC would commit to buying back any unwanted bonds at the end of the subscription period to save the issue from failure.[55] This was a major win for the government security dealers and the banking lobby.

The exchange between Eccles and *TIME* illustrates the broader political stakes of the boundary struggles over debt monetization during the war. Though bankers consistently employed the threat of hyperinflation as useful piece of propaganda (particularly the example of interwar France and Germany), the deeper concern was about the erosion of the infrastructural power of the banking system. The specter of

[54] Eccles, "Letter to Henry Morgenthau, Jr., Box 10, Folder 6, Item 12," October 27, 1942.
[55] Wicker, "The World War II Policy of Fixing a Pattern of Interest Rates," 456.

greenbacks was not necessarily terrifying to bankers because it was inflationary, but because issuing greenbacks would eject private banks from their pivotal—and lucrative—role in the system of public finance. As the Vice President of the American Bankers Association A.L.M. Wiggins put at a March 1942 conference, there was a "real danger that most of the financing of the war program will pass from private banking into direct government financing." "Our responsibility as bankers," he continued, was to see that war finance was conducted "in a way that will not destroy the [private] credit structure."[56] At the same conference, A.B.A. president H.W. Koenecke added that "above all, it is our responsibility to do our utmost to see to it that every grant of power given to the Government includes a provision for its termination as soon as the war is ended."[57]

Greenback Panic: The Federal Reserve Bank Note Issue of 1943

If financial journalists were wringing their hands in October 1942 that debt monetization was "the next thing to greenbacks," by December, it seemed the wolf was at the door. Facing an acute shortage of both circulating currency and the raw materials necessary to print paper money, the Federal Reserve Board authorized its twelve district Reserve Banks to circulate $660 million worth of Federal Reserve Bank Notes that had been in storage since they were printed during the banking crisis

[56] "Bankers See Loss of War Lending," *New York Times*, March 7, 1942, sec. Business.
[57] Associated Press, "Bankers Told To Widen War Credit Scope," *Washington Post*, March 5, 1942, sec. Financial.

of 1933.[58] These Federal Reserve *Bank* Notes—not to be confused with the standard Federal Reserve Notes (the cash in your wallet today)—were an alternative emergency currency that was issued as a direct liability of one of the twelve regional Reserve Banks rather than the Federal Reserve System as a whole. The notes were initially authorized in the Federal Reserve Act of 1913 as a way to support the retirement of the older National Bank Notes, and as an alternative means of expanding the total paper currency issue in the event that member banks were unwilling to discount a sufficient quantity of eligible commercial paper ("real bills").[59]

Never intended to become a permanent part of the currency base, Federal Reserve Bank Notes were circulated in relatively small quantities and without much fanfare between the Federal Reserve's founding in 1913 and the U.S. entrance into Second World War. But when the Fed reauthorized their emergency use in late 1942, the irregular methods it used to put the warehoused notes into circulation created a major public controversy.

Through a complex series of internal accounting maneuvers—described by otherwise charitable economists as "accounting hocus-pocus" and "financial abracadabra"—the Federal Reserve Bank Notes entered circulation not as a liability of a particular regional Federal Reserve Bank, but rather as a liability of the Treasury,

[58] A spokesperson for the Federal Reserve Board estimated that use of the older Federal Reserve Bank Notes would save 45 tons of paper, a substantial amount of nylon and ink, and 225,000 man-hours. "$660,000,000 Federal Reserve Bills Put to Work," *The Washington Post*, December 14, 1942.
[59] Leland J. Pritchard, "The Federal Reserve Bank Note," *Journal of Political Economy* 55, no. 2 (1947): 157.

held as a reserve asset by the Fed.[60] (Normally, Federal Reserve Notes are booked as a *liability* of the Fed). The details of this byzantine operation need not detain us here.[61] What was important for contemporary critics was the end result: the Treasury was provided with $660 million in spendable account balances at the Fed, without having to issue any new debt, or pay any interest to bondholders. The notes entered circulation not only without any gold backing, but also without any kind of collateral whatsoever. As one financial columnist put it, "The effect is precisely the same as if the Treasury had resorted to outright issuance of greenbacks, since the Federal Reserve Bank notes now outstanding represent unsecured noninterest bearing promises to pay of the Treasury."[62]

As they had when the Second War Powers Act was passed, the conservative Economists' National Committee on Monetary Policy immediately spoke out. The shortage of materials and circulating medium, argued Committee Secretary Walter E. Spahr, was little more than a pretext for what amounted to an illegal attempt to issue greenbacks without appearing to do so.[63] For Spahr, the issue of the Federal Reserve Bank Notes was just one more example of an insidious "Treasury domination in financial affairs," dangerously "watering down the reserves of the Federal Reserve banks with fiat money."[64]

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[60] Pritchard, 162.
[61] Leland Pritchard's article provides a thorough and even-handed explanation of the legal and accounting mechanisms used by the Treasury and Fed to get these notes into circulation.
[62] "Fiat Money," *The Washington Post*, February 9, 1943.
[63] "Protests Reserve Notes: Professor Spahr Declares Issue of the Money Is Inflationary," *New York Times*, January 22, 1943, sec. Financial.
[64] Walter E. Spahr, "Monetary Notes" (New York: Economists' National Committee on Monetary Policy, February 29, 1944), 2–3.

Congressional Republicans agreed with the Economists' National Committee. Senator Robert A. Taft, a longtime isolationist and powerful opponent of the New Deal, accused the Federal Reserve Board of resorting to "the most dangerous class of inflationary action" with the Federal Reserve Bank Notes. Although he recognized that the quantity put into circulation was itself fairly small, and presented no immediate inflationary danger, Taft cautioned, "if the treasury can do this at all, and issue notes which were printed 10 years ago, it can also go on printing these notes in unlimited quantity."[65]

Treasury officials, for their part, attempted to downplay the operation. They refused to concede that the issue of Federal Reserve Bank Notes amounted to "greenbacks" or "printing press money." Rather, the Treasury characterized the fact that these notes were issued without collateral as a "mere technicality." But as Thomas Furlong of the *Chicago Daily Tribune* put it, this assurance "provide[d] little comfort to those who consider the collateral security legally required for paper money as one of the greatest bulwarks of a sound currency."[66]

At the end of the day, it is unlikely that the use of the Federal Reserve Bank Notes were part of a concerted effort to smuggle greenbacks into the economy through a legal loophole (as conservatives like Walter Spahr accused). After the $660 million of warehoused Federal Reserve Bank Notes were put into circulation in 1943, the currency was never used again. It bears mentioning, moreover, that Federal

[65] "Taft Attacks Unbacked Note Issues by U.S.," *Chicago Daily Tribune*, February 5, 1943.
[66] Thomas Furlong, "Legal Method Found to Issue Unbacked Note," *Chicago Daily Tribune*, January 31, 1945.

Reserve officials would never have willingly facilitated a scheme to bring greenbacks back to life. Nonetheless, the episode is instructive for the light it shines on the charged political atmosphere of the time. If the issue of the special notes *had been* intended a kind of test-drive for the Treasury to take on broader monetary authority in issuing public money, the intense, highly publicized blowback that the Treasury and Fed received would surely have discouraged further experimentation along these lines. This kind of public blowback shows that there were distinct limits to the Treasury's perceived "dominance" in monetary affairs.

The Federal Reserve's Role in Japanese Internment

It is worth pausing here to note that, while the Fed went to great lengths to maintain order in the market for Treasury bonds, it did not show the same resolve when it came to other markets. When the United States government forced over a hundred thousand Japanese Americans into concentration camps in early 1942, the Federal Reserve was given the task of disposing of their property. In its own description, the Fed would offer "evacuees protection against fraud, forced sales, and unscrupulous creditors" as well as assisting them "in arranging for the administration or orderly liquidation of their business and property interests."[67]

Orderly liquidation for Japanese Americans had a distinctly different meaning than order in bond markets, however. In bond markets, maintaining order meant that

[67] Board of Governors of the Federal Reserve System, "Twenty-Ninth Annual Report of the Federal Reserve Board Covering Operations for the Year 1942," 1943, 38.

the Fed would serve as a dealer of last resort, ensuring that private dealers and traders were never forced to liquidate into a falling market and never forced to accept unreasonably low offers due to conditions of panic. This is technically what the Fed was supposed to do with Japanese Americans' property—to prevent buyers from taking advantage of the panic with offers that were below what a normal market would bear.

But in practice, "orderly liquidation" was oriented more toward liquidation than order. According to the sociologists Dorothy Thomas and Richard Nishimoto,

> The [Federal Reserve] bank undertook a definite policy of encouraging liquidation and by far the greatest number of evacuees sold their property at distress prices, gave it away, or stored it at their own expense and risk … it may safely be concluded that every evacuee incurred some loss, that many of them suffered severe and irreparable losses, both tangible and intangible, and that the burden fell more heavily upon the small owner than the large.[68]

In a detailed study of the Federal Reserve's role in facilitating internment, the historian Sandra Taylor adds, "Throughout, bank agents assumed that the evacuees should follow normal procedures in a free enterprise economy: advertise and sell for what the market would bear, and accept as a consequence of their haste some economic loss."[69] Although the Federal Reserve could have easily taken steps to guarantee a "fair" market value for evacuees' property (that is, a normatively determined value that would have obtained in a "normal" market conditions), it

[68] Dorothy S. Thomas and Richard S. Nishimoto, *The Spoilage* (Berkeley: University of California Press, 1969), 15.
[69] Sandra C. Taylor, "The Federal Reserve Bank and the Relocation of the Japanese in 1942," *The Public Historian* 5, no. 1 (1983): 21.

instead assumed that what the market would bear during this state-induced emergency was itself a fair price.

The main difference between bond investors and interned Japanese Americans in 1942 was, of course, power. While commercial banks were entrenched in the national monetary infrastructure, and could not be entirely ignored, racialized internees could safely be marginalized. The exchange between Eccles and the *TIME* magazine editors is a perfect illustration. When Japanese Americans were forced to take huge losses on the sale of their home, they nonetheless sent letters to Federal Reserve bank agents thanking them for their help in facilitating sales.[70] When banks and bond dealers were asked to forego the risk-free arbitrage opportunity of buying up underpriced bond issues, the response was indignation that the Treasury was so callously indifferent to the needs of investors.

Liquidity Politics: Debates over the Composition and Distribution of the War Debt

For the most part, the official representatives of the banking industry recognized that pushing against the Treasury and publicly demanding higher interest rates was a losing political strategy. So while the bankers in the Federal Reserve's orbit continued to privately—though unsuccessfully—lobby the Treasury for higher rates throughout the war years, the public-facing strategy increasingly emphasized the placement of debt outside the banking system. In April 1942, the Economic Policy

[70] Taylor, 19.

Commission of the A.B.A. issued a statement ranking the sources of war finance from worst to best. The "first and best method" was "taxation and sales of war bonds to the public." Second was "borrowing of idle money in the hands of individuals and corporations." Third was borrowing from commercial banks. "Fourth and worst" was borrowing directly from the Federal Reserve system, "short of printing greenbacks which is unthinkable."[71]

On one level, this seems to be a relatively straightforward policy statement. The best way to control inflation is to sell war bonds (or to tax) those who would otherwise be spending current income. If the purpose of issuing Treasury securities was to diminish current aggregate purchasing power in the economy, then this would clearly be the way to go.

The problem with this line of thinking, however, is that there is not strong evidence that bond sales to the public were coming out of money that would have otherwise been spent.[72] Even combined with high taxes and extensive wage and price controls during the war, Treasury war bond drives did not manage to curtail domestic consumption. On the contrary, expenditures on consumer goods and services increased by 69% between 1940 and 1945.[73]

While bankers' interest in minimizing the prospects of inflation was probably sincere, they had good reasons to push for a wide distribution of the war debt that had nothing to do with inflation control. As E.A. Kincaid (a consulting economist to the

[71] "Bankers Warn of U.S. Inflation," *New York Times*, April 23, 1942, sec. Business.
[72] Samuelson, "The Turn of the Screw," 676.
[73] James T. Sparrow, "'Buying Our Boys Back': The Mass Foundations of Fiscal Citizenship in World War II," *Journal of Policy History* 20, no. 2 (2008): 278.

Richmond Fed) observed at the 1942 convention of the Virginia Bankers' Association, the relation between wide distribution of war debt and inflation control was not a narrowly economic question; the concern was that narrow distribution would not be *politically* viable. If too much of the war debt ended up in the portfolios of the wealthy (or the banks), the political pressure for debt repudiation and postwar inflation might become insurmountable. Pointing to the examples of interwar France and Germany, Kincaid argued that the great inflations "came about because the great bulk of bonds in those countries had been purchased by the upper middle classes." He concluded that "There will be no danger to the debt … if every class has a stake in that debt."[74] If working people identify primarily as public creditors, rather than taxpayers or beneficiaries of government spending, they will think twice about agitating for inflation or repudiation.

The bankers wanted every class to have a stake in the debt; but they did not want every class to have precisely the same kind of stake. While the banking lobby was, as we have seen, insistent that the Treasury should issue more short-term marketable debt because this was the kind of debt that corporate and institutional investors wanted (not to mention banks themselves), they also wanted to limit the issue of liquid instruments to the general public, such as the Series E Savings Bonds, which were not marketable, but were redeemable practically on demand.

[74] Associated Press, "U.S. Seen Able To Carry Debt Of 200 Billion," *Washington Post*, June 6, 1942, sec. Financial.

In the May 1942 meeting of the Federal Advisory Council, the bankers issued a resolution declaring that they did not favor the issue of any new kind of redeemable bond. Too many demand liabilities, they argued, could create a monetary disaster after the war ended. George L. Harrison (formerly president of the New York Fed, then president of the New York Life Insurance Company) summarized the views of the Council: "After the war, if the Treasury is faced with a huge demand liability, we may have one of three things happen: (a) compulsory conversion such as took place in Great Britain at the end of the last war, (b) payment of bonds by the Federal Reserve Banks, or (c) worst of all, 'greenbacks'." There was a sound basis for Harrison's assessment of the risk. While the bankers' concern for maintaining the value of their assets was a constant in wartime or peacetime, the general public's willingness to hold, rather than redeem, savings bonds largely depended on their affective investment in the war effort. A major motivator for the public purchase of defense bonds was the desire to provide a symbolic sacrifice for "the boys" overseas.[75] Whether the masses could be persuaded to hold onto their bonds—rather than redeem them—once the boys came back home was an open question.

The Council's anxieties about a flood of postwar redemption may have been justified, but notably, they did not share the same concern about danger of debt monetization when it came to Treasury bills. These, as a result of the Fed's standing offer to buy them at the 0.375% peg, had effectively become a demand liability as well. Echoing the report issued by the American Bankers' Association, FAC

[75] Sparrow, "Buying Our Boys Back," 264–65.

President Edward E. Brown re-iterated that "corporations want market securities" and pushed for more negotiable issues.[76] Aside from marketability, the main difference between savings bonds and Treasury bills was that bills had a minimum denomination of $1,000, or roughly $16,000 in today's money. Consequently, they were held almost exclusively by financial institutions and large corporations. Savings Bonds, on the other hand, had a minimum denomination of $25, and were accessible to the working class.[77] So in short, the bankers wanted the flexibility granted by liquid portfolios for financial institutions and corporations, but wanted to avoid too much liquidity (in the form of redeemability) for the general public. Wide distribution of debt securities was desirable politically, but liquidity should remain in the hands of the few.

If the bankers demand liquidity, the Treasury's preference was to issue entirely illiquid securities. If Treasury officials had their way, the war effort would have been financed with debt that could neither be redeemed nor sold for as long as the war lasted.[78] In the early war years, the Treasury actively explored the possibility of imposing measures to require compulsory savings and compulsory lending that would oblige creditors to hold the debt for the duration of the war.[79] Eccles also

[76] "Minutes of Meeting of the Federal Advisory Council, May 17-18, 1942," 1942, 11, 16, https://fraser.stlouisfed.org/title/minutes-recommendations-federal-advisory-council-1152/meeting-documents-may-17-18-1942-1872.
[77] According to the Bureau of Labor Statistics, $1,000 in May, 1942 has the same purchasing power as $15,968.10 in October, 2020. See https://www.bls.gov/data/inflation_calculator.htm
[78] Garbade, "The Early Years of the Primary Dealer System," 14.
[79] See, e.g., Henry Morgenthau, "Letter to Mr. Byrnes," letter, Marriner S. Eccles Papers, November 10, 1942, Box 31, Folder 3, Item 11, Marriner S. Eccles Papers, https://fraser.stlouisfed.org/archival-collection/marriner-s-eccles-papers-1343/letter-mr-byrnes-465431.

supported the idea at first, much to the chagrin of members of the Federal Advisory Council.[80] If such programs were implemented, this could have both limited the Treasury's exposure to unpredictable redemption liabilities and reduced the Treasury's reliance on the marketable instruments that increasingly formed the basis of bank profits.

On its face, a forced saving program appears more rational than a policy of keeping Treasury debt in the highly liquid forms of redeemable or marketable securities, purchased on a voluntary basis. If the goal of issuing debt is to reduce aggregate purchasing power, it is difficult to see how making debt instruments more and more money-like would contribute that goal.[81] But in addition to threatening to reduce bank earnings, any hint at compulsory savings measures were a major political liability. Voluntary contributions to the war effort, the Treasury observed, were "a way of getting people excited about the war."[82] Conversely, compulsory savings and other measures that would reduce the ready convertibility of Federal debt into money were frequently painted in the financial press as a dangerous step down the road to totalitarianism. As one journalist put it,

> The revival of talk of compulsory savings in various quarters is regrettable. That idea suggests one of the major features of the decline of liberty under totalitarian Europe. They had a word for it there. They called it blocked money. Americans don't like blocked money of any kind. They will pay taxes and they will save. But deep in their nature is

[80] Board of Governors of the Federal Reserve System, "Meeting Minutes, May 18, 1942, 10:30 AM," 1942, 4–5.
[81] Economists were well aware of this in the 1940s. In 1947, Earl Rolph argued that bonds that are redeemable on demand, like the Series E bond, are "weak debt anti-inflationary instruments" due to the "money-like nature of the bonds." Earl R. Rolph, "The Payment of Interest on Series E Bonds," *The American Economic Review* 37, no. 2 (1947): 318.
[82] "Treasury Stands Pat on Voluntary Bond Sales," *Wall Street Journal*, April 21, 1942.

> an instinct to exercise complete sovereignty over their money. It is dangerous to fool around with that instinct.[83]

To avoid this kind of insinuation, Morgenthau publicly distanced himself from forced savings proposals measures in press conferences—even as the administration continually hinted that a resort to compulsion might be necessary if bond sales didn't pick up.[84] Others in the Treasury, with support from Chair Eccles, continued to push for forced savings measures well into 1943. But these made little headway in Congress.[85] As one Treasury official grumbled in a memo to Eccles, "The impression has been allowed to develop that somehow there is something positively sinister about it [compulsory savings]."[86]

In the end, the Treasury and the Federal Reserve agreed on a war finance program that would combine non-marketable redeemable debt for the public with marketable securities for banks and other institutional investors. Although the Treasury "aggressively discouraged early redemption of the war bonds and, to the extent possible, suppressed trading in the marketable debt," both classes of instrument remained readily convertible to money on demand.[87]

Of all the Treasury debt offerings, bills became the most liquid. The savings bonds held by the general public were redeemable on demand, but holders were

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[83] Raymond Moley, "'Blocked' Savings," *Wall Street Journal*, September 28, 1943.
[84] See, e.g., John H. Crider, "President Seeks Increase in Taxes and Forced Savings," *New York Times*, June 9, 1943; "Morgenthau Spurs Bond Sales Here," *New York Times*, September 24, 1943.
[85] "Eccles' Big Tax Scheme Junked by House Unit," *Chicago Daily Tribune*, October 30, 1943.
[86] Walter Ruskin Stark, "Memorandum to Chair Eccles," October 15, 1943, Box 26, Folder 4, Item 6, Marriner S. Eccles Papers, https://fraser.stlouisfed.org/archival-collection/marriner-s-eccles-papers-1343/memorandum-chair-eccles-468419.
[87] Garbade, "The Early Years of the Primary Dealer System," 14.

subject to a penalty (a lower rate of return) if they presented their bond for early redemption.[88] Bills, on the other hand, could be immediately sold to the Federal Reserve at the same 0.375% discount rate at any point before maturity, with no penalty. As the Federal Reserve's Annual Report for 1942 explained, the effect of this bill buying policy was to convert Treasury bills into a kind of interest-bearing money—one that was almost exclusively sold to banks, insurance companies and other institutional participants in the money market:

> Adoption of this policy was for the purpose of facilitating prompt adjustment of bank reserves to changing conditions. Readiness of the System to buy bills at an established rate assured banks and other holders that, if at any time it was necessary to obtain reserves or cash, they could sell their bills at an established price. This offered an encouragement to banks and others to utilize available liquid funds to purchase bills … The effect of this action was to *make Treasury bills practically as liquid as excess reserves or idle bank balances* and a desirable outlet for funds.[89]

Austerity or Public Money? Wright Patman vs. Marriner Eccles on Private Monetization

The guaranteed moneyness of Treasury bills raised serious questions about the legitimacy of bank profits. In a capitalist paradigm, profits are legitimated by the risk of loss incurred by the investor. For banks, the risk of loss is primarily tied to the maturity and liquidity mismatch between the two sides of the bank's balance sheet. Banks borrow short by issuing demand liabilities that function as money for its

[88] The return on Series E bonds was 2.9% if held to maturity of ten years. If they were redeemed within a year of issue, no interest would be paid out. After five years, the return would be 1.75%. Rolph, "The Payment of Interest on Series E Bonds," 318.
[89] Board of Governors of the Federal Reserve System, "Twenty-Ninth Annual Report of the Federal Reserve Board Covering Operations for the Year 1942," 14. Emphasis mine.

creditors (deposits) and lend long by making mortgage, small business and other loans.[90] This creates a risk of capital loss because banks face the possibility that the tempo and volume of cash inflows produced by its assets will not match the demand for cash outflows. The possibility that a bank will have to rapidly liquidate assets in a falling market in order to meet its contractual payment obligations means that the bank faces the risk of substantial capital loss or even insolvency. But during World War II, this rationale no longer applied. Treasury debt comprised an ever-greater portion of bank balance sheets and, with the Fed's bill buying policy, this debt could be liquidated *on demand*. In essence, there was no longer any meaningful liquidity or maturity mismatch between assets and liabilities. Banks held near-money on both sides of their balance sheets. In a legitimation paradigm based on calibrating rewards to risk, the private banking sector could no longer make a legitimate claim.

This point was raised by Texas Congressman Wright Patman in hearings before the House Committee on Banking and Currency in early 1943. Patman, a populist Democrat who built his political career out of challenging the Federal Reserve, organized the hearings to discuss a proposal that would permit the Treasury Secretary to issue zero-interest bonds directly to the Fed rather than continuing to add interest-bearing debt to the portfolios of private commercial banks.

Patman's argument was compelling. Why, he asked, should private banks be compensated for holding the public debt? What service were they providing? Given

[90] The emergence of securitization, the shadow banking sector and market-based finance all complicate this picture, but for the period in question, it is reasonably accurate.

the Federal Reserve's accommodative monetary policy, the expansion of private bankers' portfolios of Treasury debt did nothing to control inflation. In terms of the money supply, it made no difference whether the Federal Reserve or the commercial banks bought Treasuries. (Fed Chair Marriner Eccles, as we have seen, often stressed this point himself). And given that the Federal Reserve received congressional authorization to make discretionary purchases of public debt directly from the Treasury with the Second War Powers Act, why should it not exercise that power by purchasing that portion of the debt which was currently being warehoused on commercial bank balance sheets? Since the Federal Reserve had unlimited purchasing power, it could set the price of public debt at any level. Patman thought a zero percent interest rate was appropriate for the debt that could not be placed in the nonfinancial sector. The debt was already being monetized, he reasoned, so why should future taxpayers be burdened with interest payments to the banks?

With the war debt steadily expanding, Patman estimated that the total cost of interest payments on that debt would be $1,000 per capita. Since war bonds were "backed by the credit of the nation" and it was the sovereign government of the United States—not the banks—that was vested with "the power, and … the duty … to create all money," Patman argued that it was wrong for the Government to pay "tribute to a few people who are using the Government's credit and idle gold absolutely free":

> It is not right for Congress to make the people pay that $1,000 for every man, woman, and child in America as interest for the use of the Government's own credit and for the use of the Government's own idle

> gold by farming out the Government's great privilege and right to create money to private banking interests of the Nation.[91]

Patman bolstered this moral argument with a pragmatic one. It was not only that the banks were receiving passive income from the government for no clear public purpose; it was also that this practice placed the whole private banking sector at risk of being nationalized:

> Now, you already have the Government in this position, which I consider is a position that cannot be justified, of encouraging the sale of bonds to the banks to the extent that by the end of the next fiscal year these banks that have a capital stock investment of 3½ billion dollars will be receiving from 1 to 2 billion dollars a year interest on the Government obligations they will then hold. Now that does not seem to make sense to me. I recall the Stevens Hotel was taken over by the Government recently because they said the rent charged would amount very soon to enough to pay for it, and it would be better for the Government to buy the hotel and pay for it in cash rather than to have to pay such high interest charges. So I am apprehensive that one of these days the banks will have so many Government bonds upon which they receive interest that there will be a clamor in this country, "Why pay the banks 3½ billion dollars a year interest when they only have 3½ billion invested in capital stock; why not take all of the banks over and save that billion a year interest?" I am in favor of the private banking system, of free enterprise, and I think the banks are doing something against themselves when they place themselves in that vulnerable position.[92]

When other members of the House questioned Patman about this proposal, it was clear that many did not fully understand that Treasury securities were no longer subject to any market risk. Oklahoma Democrat Wesley E. Disney, for example,

[91] "Federal Reserve Act Amendment," § Hearings before the Committee on Banking and Currency, U.S. House of Representatives, 78th Congress, 1st Session (1943), 112–18.
[92] Federal Reserve Act Amendment, 83–84.

brought up the risk of capital loss on Treasury holdings as a possible rationale for their profits. But Patman quickly corrected him:

> Mr. DISNEY. As I understand it, these banks are heavily loaded with Government bonds, so heavily loaded that a sharp decrease in the value of Government bonds would wipe out their capital stock.
> Mr. PATMAN. Two or three points decrease would wipe out their capital stock, but there is no danger of that.
> Mr. DISNEY. Suppose there was a sharp decrease in the value of Government bonds, that would have a tendency to wipe out a part of the capital stock of the banks, or some of them, and if any sizeable number of them should get in that position, they would be liable to be in trouble and go broke and take the rest of the banks with them. How could we prevent that?
> Mr. PATMAN. That is already provided for, Mr. Disney. The Open Markets Committee [sic], … has already arranged that any bank in distress can get a hundred cents on the dollar on its bonds any time. There is where the Government's credit comes into play again. They just issue more Federal Reserve notes to buy those bonds, and they are not going to let the banks suffer. They have already told them they will not let them suffer. There is no danger of that at all.
> Mr. DISNEY. No danger of Government bonds
> Mr. PATMAN. Declining; absolutely not. It is, in effect, guaranteed by the United States, and there is no danger in the world.[93]

With the banks facing no risk whatsoever of capital loss, Patman repeatedly raised the question of what justified the banks' earnings and the high salaries of top executives. Eccles, who was present in the hearing, responded by defending the banks. He thought the question of excessive bank profits and salaries was "purely academic." Bank profits were modest; no one was "profiteering." Deflecting the questions about bank earnings, Eccles steered the conversation toward fiscal policy. Rather than probing into the earnings of private banks, he argued, Congress should see to it that the deficit is "cut to the bone," with the remaining essential spending

[93] Federal Reserve Act Amendment, 94.

financed by bond sales to the public, not to the banks. If such a policy were rigorously pursued, Congress could "avoid selling the banks $1 worth of Government securities."[94]

On the latter point, Eccles was unwavering. Although Eccles is best-known today as a proto-Keynesian and a New Dealer, this did not mean that he was an unconditional advocate of soft money and expansionary fiscal policy. As the economist Thorvald Moe points out, Eccles' attitude toward deficit financing was contingent on his perception that the economy was operating below full capacity.[95] At full employment, addressing inflationary pressures required balanced budgets and measures to rein in debt monetization. Eccles' public statements indicate that, by 1943, he believed full capacity had been reached and the economy was overheating. In February of that year, he censured Congress for doing "a very bad job" of war financing, relying too heavily on bank borrowing and not enough on taxation and borrowing from the broader public.[96] He maintained this hawkish stance for the remainder of the war and into the postwar period.

When it came to bank profits, Eccles was harder to pin down. He liked to fashion himself as a champion of the public interest, ready to leverage the power of the Board of Governors against the banking interests in the twelve regional Reserve Banks. He was, after all, the architect of the 1935 Banking Act that centralized power in the Board of Governors in Washington, thereby limiting the operational autonomy

[94] Federal Reserve Act Amendment, 81, 83.
[95] Thorvald Grung Moe, "Marriner S. Eccles and the 1951 Treasury-Federal Reserve Accord: Lessons for Central Bank Independence," Norges Bank Working Paper, May 15, 2014.
[96] Associated Press, "War Financing Program Hit," *Los Angeles Times*, February 18, 1943.

of the Reserve Banks. And even when his policy positions started to shift away from a full-throated endorsement of deficits and easy money, he resented any suggestion that he had embraced the banker's perspective. For instance, after Eccles signed off on the Federal Reserve-FAC Special Report Congress discussed above, he was exasperated to find that the report was received as little more than "a typical banker's play to get higher interest rates." He wrote to President Roosevelt, "After seven years of battling for New Deal objectives, I do not propose to give in to the banker viewpoint, and I feel a deep sense of injustice at any such false imputation."[97] And despite his public defense of bank earnings in the 1943 congressional hearings, Eccles was privately quite critical of the banks and dealers for exploiting the fiscal emergency. In his 1951 memoir, he wrote, "The bankers, of course, were delighted with most aspects of Treasury financing, as were government bond dealers and the brokers. The practices followed ensured them a windfall of profits, as they did to countless corporations and insurance companies."[98]

This was especially true once bankers became more confident that the Federal Reserve would be maintaining the pegged yield curve for the foreseeable future. This yield curve was positive, meaning that interest rates increased with maturity. In a flexible market where yields are subject to change, this would normally indicate uncertainty about the path of future interest rates, leading investors to demand a

[97] Quoted in Eccles, *Beckoning Frontiers*, 354, 357. The special report mentioned is Board of Governors of the Federal Reserve System, "Special Report to the Congress by the Board of Governors of the Federal Reserve System, the Presidents of the Federal Reserve Banks, and the Federal Advisory Council."
[98] Eccles, *Beckoning Frontiers*, 363.

higher return for long-dated bonds. But with the Fed guaranteeing that rates would remain fixed, the risk profile of long-term bonds became nearly identical to that of short-term bills. As banks and money market participants realized this fact, they started to dump bills on the Federal Reserve in order to buy up higher-yielding bonds. This began in June of 1943 and by October of the same year, the market demand for bills had all but dried up.[99] By the end of the war, $17 billion worth of Treasury bills outstanding were nearly all warehoused on the Fed's balance sheet. As Eccles put it, bills "ceased to be a market instrument."[100]

When Eccles testified before the House Banking Committee on Patman's proposal in early 1943, he defended the need for banks to make money on the public debt as a kind of compensation for the burdens that the war economy placed on the industry. The combination of direct credit controls and public financing for the war effort had squeezed banks out of their traditional loan and investment business, so it was only fair that the banks should receive some offsetting income in the form of interest on Treasury securities. What's more, Eccles pointed out that the net earnings of the banks had declined from 1941 to 1942, due in no small part to their holdings of low-yielding Treasury bills.[101]

But as the banks shifted their holdings from bills to higher-yielding bonds, this argument no longer held water. By June of 1943, concern was mounting in the FOMC that the banks were "playing the pattern of rates"—that is, they were taking

[99] Whittlesey, *Bank Liquidity and the War*, 73; Wicker, "The World War II Policy of Fixing a Pattern of Interest Rates," 454.
[100] Eccles, *Beckoning Frontiers*, 359.
[101] Federal Reserve Act Amendment, 79, 84.

advantage of the arbitrage opportunity that the pegged yield curve afforded by selling bills to the Fed at the guaranteed rate, then using the high-powered money they received for the bills to buy many multiples of longer-term, higher-yielding securities from nonbank investors.[102] By the end of 1944, Eccles privately acknowledged that bank earnings were "becoming excessive." In an environment where "the Government completely controls the money market," he thought there was no longer any need for the Treasury to accommodate banking sector demand for higher-yielding long-term bonds.[103]

These concerns about excessive bank earnings remained private, however, until after the war ended. In the final years of the war, there was little daylight between the positions Eccles took and the positions taken by various banking lobby groups. Eccles had cut his teeth as a banker, after all.[104] As much as he embraced his identity as a New Dealer, perhaps he did not stray as far from his roots as he liked to believe. When Eccles complained to the Investment Bankers' Association of America that the nation was "asleep to the inflationary danger of present war financing," and that more of the war needed to be paid for through taxes and cuts to the standard of

[102] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, June 28, 1943," 1943, 13; Eccles, *Beckoning Frontiers*, 360.
[103] "Minutes of Meeting of the Federal Advisory Council, December 3-4, 1944," 1944, 8–9, https://fraser.stlouisfed.org/title/minutes-recommendations-federal-advisory-council-1152/meeting-documents-december-3-4-1944-1900.
[104] By age 35, Eccles was running a major chain of commercial banks and serving as President of the Utah Bankers Association. Eccles, *Beckoning Frontiers*, 50–51.

living rather than inflationary borrowing from the banks, he was preaching to the choir.[105]

This austerity message was a common refrain in the financial sector. For one example, Childs and Co., a major bond dealer, published a program for debt management around the same time that was nearly identical to the one outlined in Eccles' speech—more taxation, fewer social programs and less monetization:

> No subtle devices or monetization for managing the debt need be resorted to. Sound monetary and fiscal policies**,** without wasteful expenditures for social and political purposes, will suffice. Old-fashioned thrift and an elimination of government restraint against individual enterprise will create the opportunity for the public to take care of the debt.[106]

Along similar lines, the Savings Banks Associations of the State of New York argued that "non-productive public works projects" in the postwar period would undermine the nation's ability to service the debt and cautioned that "The people must not be misled into giving up their freedom and free enterprise in exchange for 'security' and 'freedom from want'."[107]

For bankers, the austerity message was an urgent corrective to the new notions of economic entitlement that underwrote the broad-based program of war finance. Defense bond purchases during the Second World War were imbricated with the growth of the welfare state. The phrase "freedom from want" (one of the "four freedoms" outlined in President Roosevelt's famous 1941 speech to Congress about

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[105] Thomas Furlong, "Eccles Urges Heavy Taxes to Avoid Inflation," *Chicago Daily Tribune*, March 12, 1943.
[106] "Administration Fails to Grasp Inflation Problem, Says Childs," *Chicago Daily Tribune*, May 26, 1943.
[107] "Banks State Faith in Free Enterprise," *New York Times*, April 15, 1943, sec. Business.

the basic rights Americans should enjoy) was adopted by the Treasury in 1943 as a slogan in a major poster campaign for bond purchases. The posters featured Norman Rockwell's iconic image of a family seated for a turkey dinner, suggesting postwar affluence as the promised compensation for wartime frugality.[108] There is evidence, moreover, that the emergence of the welfare state made people feel more inclined to buy defense bonds. U.S. counties which received larger emergency relief payments under New Deal programs typically purchased bonds in greater volumes.[109] Even as banks, corporations and the wealthiest Americans continued to purchase the vast majority of Treasury debt, the broad participation in the war finance effort fostered a sense of fiscal citizenship that threatened to embolden workers and poorer Americans to make inflationary financial claims on the state once the war ended.[110] Containing these claims and continuing the logic of austerity in the postwar period was a primary goal for the financial sector.

But if austerity and insecurity were the promoted as the necessary price of sound finance for the people, sound finance also required higher earnings for banks. That is what the Federal Open Market Committee concluded, at least. In a November 1943 memo, the FOMC proposed raising interest rates on short-term Treasury debt as a solution to the problem of commercial banks "playing the pattern of rates"—exploiting arbitrage opportunities in the fixed yield curve and thereby monetizing the

[108] William L. Bird and Harry Rubenstein, *Design for Victory: World War II Poster on the American Home Front* (Princeton Architectural Press, 1998), 37.
[109] Bruno Caprettini and Hans-Joachim Voth, "From Welfare to Warfare: New Deal Spending and Patriotism during World War II" (London: Center for Economic Policy Research, 2019), https://repec.cepr.org/repec/cpr/ceprdp/DP12807.pdf.
[110] The phrase "fiscal citizenship" comes from Sparrow, "Buying Our Boys Back."

long-term debt. Explaining the imbalance in the current rate pattern, the memo notes that the pattern was adopted in a period when there was "considerable uncertainty about the maintenance or stability of longer-term rates," and that it was no longer appropriate, now that "a degree of confidence in the stability of longer-term rates has been achieved." It concludes that correcting the imbalance will require "narrowing the present spread between long term and short-term rates, by increasing rates at the short term."[111]

The argument for narrowing spreads and flattening the yield curve in order to correct bond market imbalances is fairly self-evident; however, the argument that spread should be narrowed by raising short-term rates, rather than lowering long-term rates, is not. "The task of financial statesmanship is to combat the belief in a higher long-term rate," the memo claims. One might think, then, that lowering the long-term rate, which did not present the same danger of speculative withholding as raising it, would be the proposed solution. This is especially true given that the memo explicitly argued that the change in the pattern of rates was required because uncertainty, or concern about the risk of future capital loss, had *decreased* as the Fed's commitment to the peg became more credible. Less risk should mean less reward. Alternatively, Patman's proposal to simply cut the private banks out of the sovereign debt market and have the Fed step in to buy the debt at zero percent interest would have solved the problem as well. But for reasons left unspecified, the FOMC did not consider either

[111] Allan Sproul, "Credit Policy and Treasury Financing," November 9, 1943, 4–5, Box 50, Folder 11, Item 13, Marriner S. Eccles Papers, https://fraser.stlouisfed.org/archival-collection/marriner-s-eccles-papers-1343/credit-policy-treasury-financing-464892.

of these solutions. The committee makes only the ambiguous statement that it felt it was necessary to transition to a rate pattern that would be "tenable in the immediate postwar period" and to pursue policies that would "protect investors in long term obligations."[112]

It does not take much reading between the lines here to understand that this means protecting the earnings of the financial sector, which already held the vast majority of marketable medium- and long-term Treasury debt at the time.[113] (Indeed, as figure 2 illustrates, the financial sector held the majority of *all* federal debt throughout the entire war period).

[112] Sproul, 1–2.
[113] Simeon E. Leland, "Management of the Public Debt After the War," *The American Economic Review* 34, no. 2 (1944): 112.

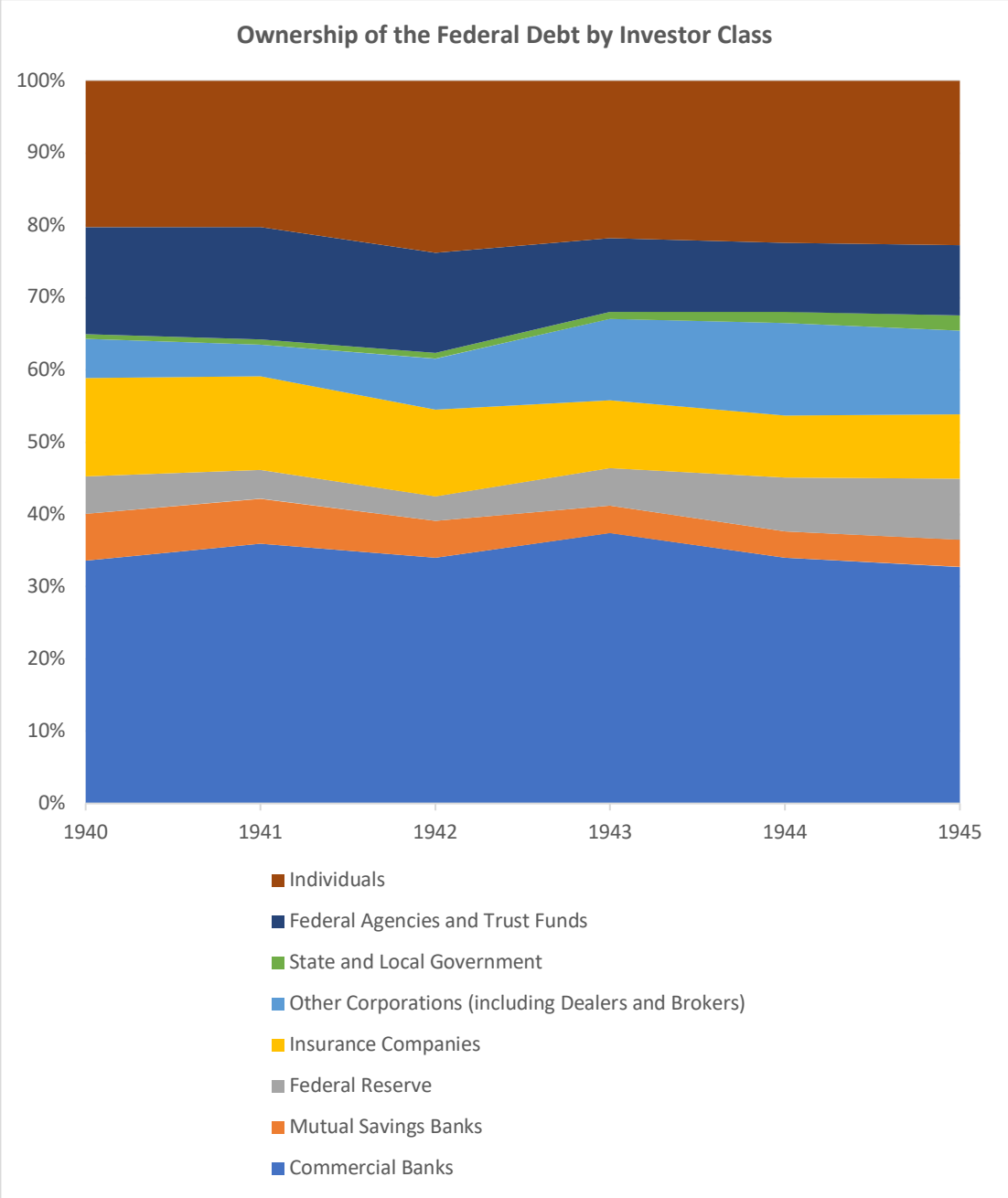

Figure 2: Ownership of the Federal Debt by Investor Class, 1940-1945

Source: Annual Report of the Secretary of the Treasury on the State of the Finances for Fiscal Year Ended June 30, 1945

In the end, the FOMC failed to convince the Treasury to raise short-term rates—a failure which would conventionally be presented as evidence of the Treasury's dominance in this period.[114] But there is another angle here. While it is true that the fiscal imperatives of the war effort were prioritized over the Federal Reserve's monetary objectives, it should not be overlooked that the banking lobby, along with its representatives on the FAC and FOMC, managed to keep proposals like Wright Patman's entirely off the table. That the interest rate was kept stable (not lowered to zero), and that private banks were allowed to accumulate colossal quantities of marketable Treasury debt was a significant victory for the banks—one that is not appreciated in the existing historical literature. World War II is sometimes idealized as a time when "elected government officials," rather than "unelected members of the Federal Reserve System" controlled monetary policy.[115] While there is undoubtedly truth in this story, it underestimates the continued influence of bankers in determining what sort of Treasury financing was deemed politically feasible. This is especially evident when one considers the fact that the Secretary Morgenthau himself considered zero-interest war finance a real possibility at the beginning of the war.[116] The fact that banks, and the financial sector more broadly, collected passive, risk-free income at a fixed rate for the duration of the war was not a foregone conclusion.

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[114] See note 6, above, on the standard historiography of "Treasury dominance" in this period.
[115] Epstein and Schor, "The Federal Reserve-Treasury Accord," 7.
[116] In a private 1942 letter, Morgenthau floated zero-interest loans as a possible part of a compulsory savings program. Morgenthau, "Letter to Mr. Byrnes," November 10, 1942, 13.

To be sure, though Patman and his congressional colleagues were derided as "monetary nincompoops" and "perpetual economic sophomores" in the press for their "fiat money bills," Eccles and the Federal Advisory Council privately acknowledged that they presented a serious threat.[117] In a September 1944 memo, Eccles wrote:

> It should be borne in mind that Mr. Patman is well-informed, persistent, and capable of leading a formidable group in Congress as well as of influencing public opinion on the outside. What seems to be his present attitude cannot be dismissed as belonging in the crank category … While Mr. Patman and his group probably could not get far at any time with their original program for financing all deficits without interest, their revised program, conceding the need to sustain the private credit system, but proposing to rely on the Reserve System to finance the debt without interest once that need has been met, presents issues which can hardly be ignored in the light of the current situation.[118]

In an FAC meeting a few months later, the bankers agreed with Eccles that the Patman proposal needed to be taken seriously. Lyman E. Wakefield, founder of the First National Bank of Minneapolis, told the Council, "There is a great danger to the banks in the movement inaugurated by Patman. The basic result of this would be a control of all credit by the Government and thereby ultimately all corporations and individuals would be subject to a rigid Government control." Wakefield subsequently suggested that the American Bankers Association "should devote itself to a campaign of education to show the implications inherent in the control of credit by the Government and the danger there would be in a costless financing of the war." Later in the meeting, after noting that "the assets of banks in the form of Governments are

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[117] "Dangerous Money Tinkering," *Los Angeles Times*, October 31, 1943.
[118] Marriner S. Eccles, "Criticism in Congress of Bank Earnings on Government Debt," September 21, 1944, 3, Box 50, Folder 14, Item 7, Marriner S. Eccles Papers, https://fraser.stlouisfed.org/archival-collection/marriner-s-eccles-papers-1343/criticism-congress-bank-earnings-government-debt-468319.

likely to rise to 80 per cent of the total" at the war's end, Eccles gloomily forecasted that "in most countries, banks are almost certain to be socialized"—though he still hoped that this could be avoided in the United States.[119]

Bankers' Melancholy

The irony of bankers lobbying for free market finance at the same time that their balance sheets swelled with risk-free, government-guaranteed assets was not lost on them. Industry conferences of the time featured abundant hand wringing about the decline of the risk-taking spirit. At an annual meeting of New York savings bankers, for instance, the president of the American Bankers Association struck a note of caution: "If governmental control of the banking system and the nation's credit is to be averted, banking must develop, without further delay, a greater degree of courage and leadership in 'risk lending' and place less reliance on Government guarantees." Guaranteed returns—whether in the form of U.S. Treasury bonds, or mortgages guaranteed by the Federal Housing Authority—were an "opiate." If banks did not do more to "shoulder the risks" that traditionally accompanied rewards, "private effort would disintegrate" and the government would gain "a monopoly of the credit structure."[120] A few months later, a keynote speaker at another meeting of New York bankers delivered a similarly dire prognosis:

> If the guarantee system is carried over into peacetime, private banking will gradually deteriorate and the spirit of free enterprise will go the

[119] "Minutes of Meeting of the Federal Advisory Council, December 3-4, 1944," 4, 10.
[120] Edward J. Condlon, "Banks Are Warned to Take More Risks," *New York Times*, October 14, 1943, sec. Business.

> way of all flesh. The hand of the Government will fall with paralyzing effect on the freedom and initiative of banking, and bureaucracy will flourish. Guaranteed credits in peacetime point the way to socialized banking.[121]

Yet another keynote address argued that "political banking" could not "create and develop new commercial and industrial enterprises." Private banking was "the cornerstone of capitalism" and had to be vigorously defended.[122]

Bankers were unified in their rhetorical gestures toward the virtues of free enterprise and the perils of state control. But how this would translate into practical terms in the postwar economy was more contentious. In particular, bankers were uncertain about when, how, and whether to transition out of the wartime fixed interest rate structure. Although parts of the banking lobby pushed for interest rate hikes to take effect immediately after the war, others were not so sure. Dr. Marcus Nadler, an economist invited to speak at a September 1944 meeting of the American Bankers Association, noted that the banks' position as the largest creditors of the federal government put them in a politically vulnerable position. "The banks are in danger of being made victims of financial sleight of hand intended to ease the load of the war

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[121] "Pressure Selling of Bonds Decried," *New York Times*, January 18, 1944, sec. Business. The speaker, Lionel D. Edie, was specifically concerned about the loan guarantee program established under the Federal Reserve's Regulation V. This program allowed banks to issue loans for the purposes of war mobilization and receive a guarantee against loss of principal of up to 100%, and with an average guarantee of 90%. Frances Quantius, "The Insurance of Bank Loans and Its Implications," *The Journal of Business of the University of Chicago* 19, no. 3 (July 1946): 134–35.

[122] S. Oliver Goodman, "Bankers Hear Thorpe Assail U.S. Financing," *Washington Post*, June 3, 1944. The claim that only private finance could "create and develop new commercial and industrial enterprises" is dubious, to say the least. It was precisely state investment during and immediately after World War II that led to many of the most important technological breakthroughs of the twentieth century, from computer technology and the internet to jet planes and laser technology. Private finance in the postwar period has been more likely to monetize the progress made in publicly funded research than to fund radical innovation. See Mariana Mazzucato, *The Entrepreneurial State: Debunking Public vs. Private Sector Myths* (New York: PublicAffairs, 2013).

swollen government debt," he warned. Nadler cited a number of possibilities: deliberate inflation, nationalization of the Federal Reserve, mandatory refunding of bank-held debt at lower rates or redeeming outstanding bonds with depreciated currency. Given that the banks were so vulnerable to measures that could wipe out the real value of their assets, he counterintuitively urged the ABA to push for the maintenance of low rates. High rates would only "increase the political pressure for inflation or other radical measures." [123] The acceptance of lower returns for the time being was seen as a political necessity.

The risk Nadler identified was real enough. At the end of the war, an increase of even 0.5% in average interest rates would cost the Treasury more in debt service than the entire sum of corporate income taxes received between 1925 and 1940. This made lobbying to abandon the peg extremely risky politically. Additionally, higher rates continued to pose a risk to bank capital. As of June 1945, a 3% decline in the aggregate market value of commercial bank holdings would cause a loss of 33% of total bank capital.[124] Bankers, in short, were in a bind. They wanted "politics" out of banking and "markets" to return—but only if they could maintain the real value of their assets through the transition by avoiding both consumer price inflation and precipitate capital loss. This would be the key dilemma of the postwar period.

As the labor economist George Soule explained in early 1946, the war had generated a mountain of liquid assets in the form of bank deposits and Treasury debt

[123] Thomas Furlong, "Banks Termed Vulnerable to Money Politics," *Chicago Daily Tribune*, September 26, 1944.
[124] Lawrence H. Seltzer, "The Changed Environment of Monetary-Banking Policy," *The American Economic Review* 36, no. 2 (1946): 71, 75.

holdings. But because of the wartime controls, nobody had yet been able to convert these holdings into actual spending power. The question of who, if anyone, would benefit from the money would be "what all the postwar warfare is about."[125]

[125] George Soule, "Profits by the Billion," *The New Republic*, January 7, 1946.

4. STAGGERING TOWARD LIBERALIZATION: THE POSTWAR PROJECT OF ORDERLY RECONVERSION

On August 18, 1945, four days after the United States declared victory over Japan, President Truman signed an executive order outlining the guiding principles for an "orderly transition to a peacetime economy." The goal was to "move as rapidly as possible … toward the removal of price, wage, production and other controls and toward the restoration of … the free market." Liberalization had to be gradual enough, however, that it would not risk "endangering the stability of the economy."[1] Pursuit of an "orderly reconversion," much like the Federal Reserve's pursuit of an orderly government security market, was predicated on the idea that the suspension of the price mechanism was necessary to ensure its proper functioning. For prices to reflect the real dynamics of supply and demand, active management was necessary to suppress speculative and disorderly price movements.

This chapter analyzes the political struggles between bankers, politicians, Federal Reserve officials and workers surrounding the project of orderly reconversion. Orderly reconversion provided a discursive terrain for debates in this period, rooted in a common goal of dismantling the wartime command economy, but equally rooted in the recognition that stable free markets could not be achieved by immediately removing controls. It was generally recognized that the transition out of

[1] Harry S. Truman, "Executive Order No. 9599 - Providing for Assistance to Expanded Production and Continued Stabilization of the National Economy During the Transition From War to Peace, and for the Orderly Modification of Wartime Controls over Prices, Wages, Materials and Facilities" (1945), https://www.trumanlibrary.gov/library/executive-orders/9599/executive-order-9599.

a war economy would not be as simple as excising the state from the negative space of the market. Achieving free enterprise at home and liberalized trade relations abroad would require something more: temporary insulation from market pricing to guarantee that the transition would be "orderly." More controversial was the question of how much and what kind of administrative control would be necessary to facilitate such a transition. At what point did speculative disorder threaten to undermine the truth-producing capacity of the competitive price mechanism? And at what point did policies ostensibly aimed at guaranteeing an orderly transition to a free market themselves turn the corner into market-subverting regimentation and "totalitarianism"? Such were the terms of the debate.

Four key sources of sources economic disorder (both actual and potential) loomed large in this period: structural unemployment, speculative volatility in foreign exchange markets, accelerating consumer price inflation, and the prospect of an asset-price collapse in the U.S. government securities market. In the sections that follow, I examine how the U.S. banking lobby, with help from congressional allies and Federal Reserve officials, promoted a vision of orderly reconversion that entailed a rapid return to market discipline in all but one of these domains. Bankers promoted liberalized labor markets even if that meant substantial unemployment, lobbied for free international capital movements without much concern for the destabilizing effects of speculative flows of "hot money," and called for decontrol of consumer prices even at the cost of substantial inflation. In all three of these arenas, bankers argued that order should follow automatically from reconversion and the return of

market discipline. When it came to the pegged government securities markets, however, bankers argued that preventing the possibility of a speculative asset price collapse was more important than a rapid return to market pricing. Here, where market discipline would be applied to banks themselves, they were more concerned with an *orderly* resumption of market pricing than a rapid one. Since both the Treasury and the Federal Reserve endorsed this logic, the Federal Reserve maintained the peg for several years after V-J day, even though it was widely recognized that the peg was one of the central factors contributing to postwar inflation.

Still, the Federal Reserve, under the leadership of Marriner Eccles, ultimately took the problem of inflation much more seriously than did the bankers. The second half of this chapter examines the political tensions that emerged over Eccles' proposal for a secondary reserve requirement, a regulatory framework that was meant to contain inflation while simultaneously protecting the bond market from a speculative collapse. The secondary reserve requirement, dubbed the "Eccles Plan" in the press, would immobilize banks' portfolios of marketable Treasury securities by forcing banks to hold a certain portion of those securities as a reserve against deposit liabilities. This, Eccles hoped, would prevent banks from monetizing the public debt, and thus help to dampen inflationary pressures. I argue that this idea was anathema for bankers because it would have made their Treasury holdings illiquid. In a close reading of congressional hearings on the Eccles Plan, I show how bankers employed the rhetoric of orderly markets to successfully defend the liquidity of their large portfolios of Treasury securities. Rhetorically placing themselves on the side of the

"real economy," and against speculative, nominal disorder, bankers were able to defend their right to liquidate their Treasury securities on demand in the secondary market, even as they acknowledged that the liquidity and continuity of that market was dependent on the Federal Reserve's continued willingness to maintain the interest-rate peg.

Orderly Labor Markets: The Employment Bill of 1945

The question of how to guarantee an orderly transition from a system of wartime controls to a system of postwar free enterprise was a subject of high-profile debate even before the United States was directly involved in the war. By early 1941, Senator Robert Wagner was already promoting the need for Congressional planning to ensure that the "conversion from a defense-economy to a peace-time economy" would occur "with a minimum of shock and disorder in the economic system." Wagner's main goal was guaranteeing full employment, which, he believed, early mobilization efforts had already shown to be possible.[2]

At the war's end, with millions of soldiers returning home and looking for work, full employment policy became an overwhelmingly popular idea. In mid-1945, 76% of Americans surveyed believed that the government should find jobs for "workers who lose their jobs and are unable to find work because there are not enough jobs." Around the same time, books on full employment were also making it

[2] See Robert F. Wagner, "Plan Now for Full Employment in Post-Emergency Period," *American Labor Legislation Review* 31, no. 1 (1941): 7.

on to the bestseller list. Pabst Blue Ribbon even offered a $50,000 prize for the best essay on the topic.[3] But what would full employment policy mean in practice?

Early proposals, like the one advanced by the National Resources Planning Board, stressed that the government should directly provide jobs to the unemployed through public works, and that employment at prevailing wages should be considered a human right.[4] As Allied forces approached victory in Europe, however, it seemed that no such commitment from the government was forthcoming. One United Auto Workers executive complained in mid-1944 that there "no adequate overall planning is being done to insure orderly reconversion which will lead into a post-war period of full employment. The prevailing idea seems to be to take off all Government controls as quickly as possible and let individual enterprise take care of reconversion."[5]

Indeed, as full employment policy made its way from popular idea to actual legislation, direct job creation and an effective right to employment fell by the wayside. By the time Senator Wagner and his committee formally introduced the Full Employment Bill of 1945, the emphasis had already shifted from direct public job provision to indirect job creation through macroeconomic management. Government's primary responsibility would be using countercyclical fiscal

[3] Steven Attewell, *People Must Live by Work: Direct Job Creation in America, from FDR to Reagan* (Philadelphia: University of Pennsylvania Press, 2018), 130–31.
[4] Attewell, 140–44. The National Resources Planning Board was a New Deal era institution whose goal, among other things, was to create a portfolio of "shovel ready" public-works projects of which the Federal Government could make use as needed to stabilize employment levels. See Landon G. Rockwell, "The Planning Function of the National Resources Planning Board," *The Journal of Politics* 7, no. 2 (1945): 169–78.
[5] Richard T Frankensteen, "Reconversion Plan Needed: Prompt Passage of Kilgore Bill Urged to Avert Unemployment," *New York Times*, July 28, 1944.

stabilization to create favorable conditions for the private sector to generate full employment. Direct job creation would be, at best, a residual. The discursive terrain had shifted as well. Rather than emphasizing the right to economic security and freedom from want as Franklin Roosevelt had, Wagner and other congressional liberals campaigned for the bill by stressing their loyalty to free enterprise system: "Full employment and free enterprise are twin objectives," the Wagner committee argued. "[W]e cannot have full employment . . . without the expansion of private enterprise and the investment of private capital."[6]

The meaning of full employment was watered down even further before the bill was passed into law, due in no small part to the lobbying of the banking sector and the regional Federal Reserve Banks.[7] In the congressional hearings on the 1945 bill, presidents of several Reserve Banks, including Allan Sproul of New York, sent in testimony forcefully articulating the threat that robust full employment legislation would pose to a free enterprise system. The consensus in their testimony was that the low levels of unemployment achieved during the war (as low as 1.2%)[8] were impossible to maintain in peacetime without continuing the "totalitarian features of wartime control" that were necessary to contain inflation. While the Reserve Bank

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[6] Quoted in Attewell, *People Must Live by Work*, 157–60.
[7] Unlike the Federal Reserve's Board of Governors, who are nominated by the President and confirmed by the Senate, the appointment process for Federal Reserve Bank presidents directly ties them to the private banking sector. A Federal Reserve Bank president is appointed through the joint approval of the Reserve Bank's class B directors, who are appointed by commercial banks, and the class C directors, who are appointed by the Board of Governors. Technically the class B directors are meant to serve "the public interest," (unlike the Class A directors who are meant to directly represent the interests of the banks), but their selection by commercial banks naturally informs these directors' view of what the "public interest" is.
[8] US Census Bureau, "Historical Statistics of the United States, Colonial Times to 1970," September 1975, https://www.census.gov/library/publications/1975/compendia/hist_stats_colonial-1970.html.

presidents acknowledged the need for "orderly social and economic adjustment," they argued that persistently attempting to push unemployment below a certain threshold—Hugh Leach of Richmond suggested 5%—would be incompatible with a system of free enterprise. Only an "absolute dictatorship" could ensure full employment in its most literal meaning. The Reserve Banks therefore suggested that the phrase "full employment" be replaced with "a continuing high level of employment" and a commitment to creating a favorable business climate which would allow private enterprise to maximally develop national productivity.[9]

Chair Eccles' views were similar to those of the Reserve Bank presidents. He suggested to the Wagner committee that the language of "full employment" should be replaced with "the overall objective of freedom from alternate depressions and booms," and warned that maintenance of wartime employment levels would create "uncontrollable inflation." Employing a patriarchal line of reasoning common in the hearings,[10] Eccles maintained that employment numbers during the war were artificially high, as they included large numbers of women in the labor market who should rightly be "occupied in the household." "Sustainable" levels of employment,

[9] "Full Employment Act of 1945," § Hearings Before a Subcommittee of the Committee on Banking and Currency, U.S. Senate, 79th Congress, 1st Session (1945), 1067–69, 1086–87, 1116–18, 1219–21.
[10] For one example of many, George E. Outland, a California State Congressman, argued in the hearings that one of the chief benefits of the full employment bill was that it would shore up the traditional patriarchal family structure: "The existence of job opportunities enables each parent … to fulfill his responsibility to family and to society – the father by providing material support, the mother by maintaining the kind of home which will keep their family happy and healthy." Full Employment Act of 1945, 140.

consistent with "stabilized economic progress," and not artificially high definitions of full employment, should be the goal.[11]

Fed officials' talking points perfectly mirrored the positions of influential private bankers like J.P. Morgan chair Russell Leffingwell and those serving on the Federal Advisory Council.[12] Underlying them all was the fear, articulated by University of Chicago economist Henry Simons, that the quest to solve "the short-term problem of employment" would lead to the "expropriation of bondholders" through inflation.[13]

On the other end of the political spectrum, supporters of a robust employment guarantee testified to the injustice of maintaining bond values at the expense of labor. The progressive Institute of Living Law issued admonished the Wagner bill's authors for their failure to put the full weight of government behind the promise of full employment. Rather than using the power of the purse to directly guarantee jobs, it merely proposed vague and indirect measures to encourage private enterprise to do so. As a result, the bill was "far from being a gilt-edged bond." Where Treasury bonds were backed by the full faith and credit of the United States, the employment bill did "not pledge any and all of the assets of the Federal Government … to redeem the Government promise to achieve full employment." It would only use its spending

[11] "Eccles Wants Private Initiative Stressed, Not Deficit Financing, In Drive for Economic Stability," *Wall Street Journal*, June 25, 1945.
[12] See "Minutes of Meeting of the Federal Advisory Council, September 16-17, 1945," 1945, https://fraser.stlouisfed.org/title/minutes-recommendations-federal-advisory-council-1152/meeting-documents-september-16-17-1945-1901; Full Employment Act of 1945, 1118–20.
[13] Full Employment Act of 1945, 1211.

power as a last resort, and even then, only insofar as it did not disturb business confidence.[14]

Organized labor made similar criticisms. For instance, E.E. Milliman, president of the Brotherhood of Maintenance of Way Employees, drew a trenchant contrast between the pegged bond market and the "free" labor market:

> The American dollar is guaranteed an annual wage when invested in a bond. Interest upon it must be paid. If we are justified in enacting laws which guarantee an annual wage on the American dollar, then we are even more justified in the enactment of laws guaranteeing an annual income for the American worker. As between the two, the well-being of the worker is by far the most important.[15]

Bolstering this line of argumentation was the idea that speculative disorder could pose just as much of a threat in labor markets as it could in the bond markets. Just as a fear that bond prices would fall could be enough to freeze buying and generate a self-fulfilling prophecy, supporters of a robust employment guarantee argued that the "fear of unemployment will itself generate unemployment." The expectation of future unemployment would prompt workers to contract their spending, leading to a shortfall in demand and consequent retrenchment in industry. Only the direct provision of jobs would "furnish the needed confidence for orderly and rapid conversion to full peacetime production and employment."[16]

If organized labor challenged an understanding of orderly reconversion that privileged bond values over the wellbeing of (implicitly male) workers, women's

[14] Full Employment Act of 1945, 1041–42.
[15] Full Employment Act of 1945, 1150.
[16] Full Employment Act of 1945, 562.

groups likewise challenged the patriarchal vision of orderly reconversion as a return to an idealized model of white male breadwinners and domestic female dependents. The president of the Young Women's Christian Association—listed in the congressional record under her husband's name as Mrs. J.B. Caulkins—upbraided the men running the hearing for falsely assuming that women worked outside the home merely for "pin money." Even if many working women hoped to eventually marry and leave the paid workforce, the undeniable fact was that most women worked out of economic compulsion. This was especially true for Black women. For most women, the alternative to work was not an idyllic life of bourgeois domesticity, but destitution. As such, orderly reconversion could not mean simply "attempt[ing] to solve unemployment by pushing women out of jobs." After all, reasoned Caulkins, "These girls have to work to eat." Carefully documenting the indignities that women faced as "marginal workers," and the potential downward wage pressure that they would exert on male workers if they were allowed to form a "pool of unemployed," Caulkins argued that concerted full employment policy was the only way to ensure the dignity of both men and women in the workforce.[17] Orderly reconversion meant making provisions for women to keep their jobs, not using "market" discipline to reconstruct a patriarchal ideal of the home that, in any event, would remain unattainable for large swaths of the population.

Outside of the congressional hearings on full employment, there was also significant grassroots pressure from working mothers to ensure that orderly

[17] Full Employment Act of 1945, 749–50.

reconversion included provisions for public childcare that would enable women to stay in the paid workforce. During the war, grants and loans disbursed under the Defense Housing and Community Facilities Services Act of 1940 were used by the U.S. military to fund public daycare centers across much of the country. As the historian Emilie Stoltzfus documents, there was immense pressure from conservative groups to close these public daycare centers at the war's end as part of the reconversion effort. Catholic groups, for example, argued that defunding public childcare was an essential part of "women's crusade to restore the home, the family, and an orderly human society." Against this patriarchal ideal of reconversion, women who used the public childcare services during the war agitated for a more liberatory vision. Working mothers in Cleveland, for instance, created organizations like the Day Care Committee to lobby both local and federal government to extend wartime childcare provisions. The group was successful in achieving a temporary extension of childcare funding by invoking the need for orderly reconversion. Its prodding led the Cleveland City Council to declare that "continued operation of Day Care Centers [was] an essential part of the program of orderly reconversion." [18]

In the end, however, it was the bankers' conception of an orderly transition, rather that of organized labor or women's groups, that won out. Provisions for public daycare in Cleveland were eventually struck down by courts, who argued that "The bestowal of care at public expense to the children of those whose financial condition

[18] Emilie Stoltzfus, *Citizen, Mother, Worker: Debating Public Responsibility for Child Care after the Second World War* (Chapel Hill, NC: The University of North Carolina Press, 2003), 55, 64.

does not require it [was] an expenditure of public funds for a private purpose."[19] As for a substantive federal employment program, the historian Steven Attewell persuasively documents how the liberal Keynesian authors of the bill had already prophylactically excised the more radical versions of a job guarantee before it was even subject congressional debate, as they feared that such a provision would never pass through Congress.[20]

This fear was well founded. Unprecedented wartime tightness in the labor market had begun to strengthen the efforts of unions to organize the south, which left southern Democrats increasingly disinclined to endorse pro-labor legislation.[21] A guaranteed job, like a national minimum wage, public childcare, and other federal programs, would threaten to undermine the labor discipline of the Jim Crow system by empowering Black workers. Southern democrats had been willing to collaborate with their political party on labor legislation in the 1930s, when unemployment was high. But now the risk to white supremacy was too high to tolerate. Nor, for that matter, would major Northern industrialists brook such a threat to labor discipline. Charles E. Wilson, the outspoken president of General Electric, summarized the sentiment of his class when he said, "None of us, I believe, has a right to a job—although it is fashionable to say so. The most we have under the traditional guarantees of this republic is the right to an opportunity, and at that point we are on

[19] Stoltzfus, 82.
[20] Attewell, *People Must Live by Work*, 165–67.
[21] Sean Farhang and Ira Katznelson, "The Southern Imposition: Congress and Labor in the New Deal and Fair Deal," *Studies in American Political Development* 19, no. 1 (2005): 7; see also David P. Stein, "Fearing Inflation, Inflating Fears: The End of Full Employment and the Rise of the Carceral State" (Dissertation, University of Southern California, 2014).

our own. This is the fundamental distinction between the American capitalistic system and a theoretical managed economy by any name."[22]

Even with direct job creation out of the picture, Dixiecrats, congressional Republicans and the forces of organized capital still found much to oppose in the 1945 bill. The banking lobby joined with organizations like the U.S. Chamber of Commerce, the National Association of Manufacturers and the American Farm Bureau Federation to block the bill in the House of Representatives.[23] In order to get it through the House the following year, the bill's authors replaced language stipulating the Federal government's responsibility to "assure continuing *full* employment" with a responsibility "to promote *maximum* employment, production, and purchasing power." And, unlike the original bill, the new law specified price stability as both a limiting factor in the pursuit of high employment and a macroeconomic objective in its own right.[24]

It was this limited sense of maximum employment that shaped the Federal Reserve's orientation toward macroeconomic management in the decades to come. By the late 1950s, cost-push theories of inflation that emphasized the inflationary effects of union wage demands gained increasing traction in both Congress and the

[22] "Hoover Denounces Curbs on Progress," *New York Times*, October 9, 1945.
[23] Margaret Weir, *Politics and Jobs: The Boundaries of Employment Policy in the United States* (Princeton, NJ: Princeton University Press, 1993), 46. See also Stein, "Fearing Inflation, Inflating Fears."
[24] Gary J. Santoni, "The Employment Act of 1946: Some History Notes," *Federal Reserve Bank of St. Louis Review* 68, no. 9 (1986): 12, 15. Emphasis added.

Federal Reserve.[25] And by the 1960s and 1970s, the idea that a certain level of unemployment was necessary to contain inflationary pressures had become widely accepted.[26] In an economic paradigm where true full employment was seen as incompatible with wage discipline and price stability, inflation-control took center stage.

Orderly Foreign Exchange Markets: Bankers' Opposition to Bretton Woods

With the 1945 bill, bankers and Federal Reserve officials were part of a winning coalition of conservative politicians and industrialists. Strategically invoking the danger of inflationary disorder in consumer markets, they helped to quash the possibility of an enforceable right to economic security, and a more robust conception of orderly labor markets. One year earlier, bankers waged a similar campaign against the idea of orderly foreign exchange markets that was eventually ratified in the Bretton Woods Agreement. In this case, the bankers' campaign against the Roosevelt administration's internationalist view of economic order was more isolated, and less successful.

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[25] See Norikazu Takami, "The Baffling New Inflation: How Cost-Push Inflation Theories Influenced Policy Debate in the Late-1950s United States," *History of Political Economy* 47, no. 4 (2015): 605–29.

[26] Most famously, the idea of a tradeoff between inflation and unemployment was formalized by economist A.W. Phillips in 1958. This became known as the "Phillips curve." In the late 1960s, Edmund Phelps and Milton Friedman extrapolated from the Phillips curve to propose a theoretical "natural" or a "non-accelerating inflation rate of unemployment" These ideas stressed that relative price stability was incompatible with true full employment, and that a certain level of unemployment was structurally necessary for stable growth. See A. W. Phillips, "The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957," *Economica* 25, no. 100 (1958): 283–99; Edmund S. Phelps, "Phillips Curves, Expectations of Inflation and Optimal Unemployment over Time," *Economica* 34, no. 135 (1967): 254–81; Milton Friedman, "The Role of Monetary Policy," *American Economic Review*, no. 68 (March 1968): 1–17.

From the beginning of negotiations, U.S. bankers—particularly the more internationally oriented New York bankers—firmly opposed to the famed Bretton Woods agreement, which aimed to institute an orderly foreign exchange market by creating fixed but adjustable exchange rates. Bankers were especially hostile to the establishment of the International Monetary Fund, which was intended to grant emergency foreign exchange credits to debtor countries in order to shore up the fixed exchange system and prevent speculative attacks on national currencies. American bankers, as we will see below, were worried that domestic bond market volatility would threaten them with capital losses. But they had no interest in shielding European countries from exchange rate volatility. In the international arena, they insisted that volatility was simply the price one paid for the salutary effects of market discipline.

Private financiers in the United States not only spoke out against Bretton Woods; they also attempted to materially undermine it. During the Bretton Woods negotiations of 1944, the United States' major bargaining chip for motivating British participation in the international monetary framework was the United Kingdom's dire need for dollar credits. Recognizing this, a coalition of New York bankers, with help from the New York Fed, tried to scuttle the entire deal by offering to organize a private financial rescue of Britain in exchange for their withdrawal from the agreement.[27]

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[27] Benn Steil, *The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White, and the Making of a New World Order* (Princeton, NJ: Princeton University Press, 2013), 188; Jonathan Kirshner, *Appeasing Bankers: Financial Caution on the Road to War* (Princeton, NJ: Princeton University Press, 2007), 125.

New York bankers' opposition to the deal is perhaps unsurprising. They would be the major losers in it, after all. Indeed, one of the main goals of the Bretton Woods regime in general, and the IMF in particular, was to insulate exchange rates from the depredations of private financial speculators in New York and London. As the progressive Democratic congressman Jerry Voorhis put it, Bretton Woods would "put international exchanges for the first time on an orderly basis." It would "take control of them away from private manipulators and place it in the hands of representatives of the governments of the world."[28] The only people who stood to lose from the establishment of the IMF, said Harry Dexter White of the U.S. Treasury, were the "buzzards" in the foreign exchange markets.[29]

Naturally, the buzzards put up a fight. The suggestion that European national economies needed to be protected from exchange rate volatility appeared to bankers to be little more than a thin pretext for shielding uncreditworthy debtor governments from the discipline of international money markets.[30] A newsletter of the Guaranty Trust Company of New York captured the bankers' point of view concisely. The problem was that the promise of exchange rate stability was held out without "striking at the causes of instability": "Only when nations balance their budgets, hold their tariffs at moderate levels, follow sound monetary and credit practices at home, and otherwise keep their financial houses in order can the exchange values of their

[28] Quoted in Armand Van Dormael, *Bretton Woods: Birth of a Monetary System* (London: Macmillan, 1978), 262.
[29] Steil, *The Battle of Bretton Woods*, 217.
[30] The American Bankers Association rejected the proposals for the IMF on precisely these grounds. See Steil, 253.

currencies be permanently maintained." In the absence of measures to keep economic fundamentals aligned with nominal exchange rates, the only result could be mounting imbalances and, inevitably, monetary "chaos" when the time for readjustment came.[31]

The disagreement between the U.S. banking sector and the Roosevelt administration was essentially a disagreement about the meaning of economic order. For bankers, flexible money markets produced order and guaranteed that the international value of currencies would be determined by market discipline. Volatility in free markets might be disruptive. But attempts to institute "orderly" exchange rate movements by government fiat would only be an attempt to swim against an inexorable current of real economic forces.

For the Roosevelt administration, on the other hand, the economic history of the entire early 20th century was a demonstration that speculative volatility and flights of hot money undermined international order. Allowing private capital flows to destabilize exchange rates disrupted trade and led to nationalist defensive measures like tariffs and competitive devaluation. This had contributed to the political disintegration of Europe and, eventually, to an immensely destructive world war. The only viable solution to political disorder was to create a monetary institution that would allow for the stable, "orderly adjustment" of exchange rates—one that would avoid the extreme volatility, balance-of-payment crises and speculative attacks on national currencies that had plagued the old order. Orderly foreign exchange markets

[31] Guaranty Trust Company of New York, "The Bretton Woods Agreements," *The Guaranty Survey* 24, no. 5 (August 29, 1944): 10.

required fixed but adjustable exchange rates. Fixed rates would avoid allowing short-term capital flows and volatility to distort underlying fundamentals and disrupt trade; adjustable rates would allow gradual and deliberate movements to correct structural imbalances. "Stability without rigidity and elasticity without looseness" was the controlling idea.[32]

In the end, the financiers' self-interested advocacy of money market discipline was no more successful than their ploy to entice Britain out of the Bretton Woods talks with a private loan. John Maynard Keynes, reviled by New York bankers, managed to convince British officials that it was better to stick with the U.S. Treasury than to rely on bankers who "have no power whatever to implement their promises."[33] This repudiation of the New York banking elite formed a striking contrast to the experience of First World War. After that war, New York bankers, organized by Benjamin Strong and the Federal Reserve Bank of New York, had been at the forefront of a European reconstruction effort based on fiscal austerity and a return to the prewar gold standard.[34] Now, it seemed, they were being marginalized by social democratic planners on both sides of the Atlantic.

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[32] Dormael, *Bretton Woods*, ix.
[33] Steil, *The Battle of Bretton Woods*, 188–89.
[34] See Priscilla Roberts, "Benjamin Strong, the Federal Reserve, and the Limits to Interwar American Nationalism - Part I: Intellectual Profile of a Central Banker," *FRB Richmond Economic Quarterly* 86, no. 2 (2000): 66–67.

Orderly Consumer Markets: The Politics of Price Controls

If organized capital stoked inflation fears to defeat the more radical possibilities of the 1945 employment bill, it did not thereby solve the inflation problem. According to Reconversion Director (later Treasury Secretary) John W. Snyder, inflation was "the greatest single danger to an orderly reconversion."[35] The war economy had been a "disequilibrium system," said J.K. Galbraith, producing a tremendous excess of purchasing power and effective demand over the supply of goods and services and then preventing price adjustment through a comprehensive system of controls.[36] Immediate liberalization—allowing prices to rapidly increase back toward a theoretical equilibrium of supply and demand—posed the risk of runaway inflation as wage demands sought to keep pace with cost-of-living increases.[37] Belief in an underlying equilibrium here was not much use if prices came untethered from the mechanism of supply and demand in the process of adjustment. Keeping reconversion orderly would thus require slowing or postponing the removal of direct controls until real economic development could catch up with the enormous pile of nominal claims that the war had generated.

A major obstacle to orderly reconversion, however, was that there was no mechanism in place to prevent the pile of nominal claims from continuing to grow. With the peg in place, banks had the ability to monetize federal debt and expand the

[35] "Inflation Now Our Most Dangerous Foe," *The Atlanta Constitution*, August 17, 1945.
[36] J. K. Galbraith, "The Disequilibrium System," *The American Economic Review* 37, no. 3 (1947): 287–302.
[37] Truman consistently warned about the threat of "runaway inflation" if controls were lifted prematurely. See, e.g., "President Asks Early Action on Price Controls," *Los Angeles Times*, January 29, 1946.

monetary base at their own initiative, with no possibility of effective restraint from the Federal Reserve. As the Federal Reserve Board of Governors argued in its 1945 *Annual Report*, it was this dynamic, more than any wage-price spiral, that formed the core of the inflation problem. In 1945, commercial banks held $20 billion in Treasury certificates, with another $20 billion of Treasury bonds held outside the banking system that were eligible for bank purchase. An additional $34 billion worth of Treasuries were currently bank-restricted but projected to become bank-eligible in the near future. As long as the Federal Reserve maintained the interest-rate peg, this gave banks a tremendous incentive to "play the pattern of rates," as they had begun to do toward the end of the war. Playing the pattern of rates looked like this: commercial banks would sell short-term Treasuries to the Fed on demand. This would result in a net increase to the reserve position of the commercial banking system as a whole. Since reserves were "high-powered" money, a given increase in the net reserve position of the banking system enabled an expansion of deposit liabilities that was roughly six times greater than the reserve increase. Expanded bank credit could then be used to purchase longer-term Treasury bonds from the public. By this method, the commercial banking system could, in theory, purchase the entire outstanding marketable debt. Indeed, doing so would not even require that they sell more than 50% of their current holdings to the Fed.

The end result of this arrangement, the Board of Governors argued, was that "the money supply [could] be increased on the volition of the banks irrespective of national monetary policy and without control." Eliminating the peg and allowing

interest rate increases would have solved the problem directly. But these avenues of action were rejected by the Board for two reasons. First, they would be too expensive to the Treasury. Second, in order to be effective in restraining inflation, interest rate hikes would have to be so extreme that they would create disorder in the bond markets, destabilize private financial institutions and potentially even undermine confidence in the retail banking system.[38] This line of argumentation was widely accepted by the end of the war. With such a large outstanding debt, there was broad agreement that the market for U.S. government securities had to be stabilized.

What, then, could be done about inflation?

One possibility was to maintain direct controls on wages, prices, rents and scarce materials until the productive capacity of the economy had recovered to the point where the inflationary pressures created by shortages and bottlenecks had subsided. This was the position of the Office of Price Administration (OPA), an agency created in 1941 to manage the wartime system of price controls.

In the immediate postwar period, the OPA pressured the Truman administration to retain the full gamut wartime controls for 12-15 months after the fighting ended.[39] World War I provided the historical rationale for this policy. According to OPA director Chester Bowles, inflation after the Great War—and the ensuing depression of 1920—were caused in no small part by the premature withdrawal of price controls. This time around, if price controls could prevent an

[38] Board of Governors of the Federal Reserve System, "Thirty-First Annual Report of the Federal Reserve Board Covering Operations for the Year 1944," 1945, 3–7.
[39] Andrew H. Bartels, "The Office of Price Administration and the Legacy of the New Deal, 1939-1946," *The Public Historian* 5, no. 3 (July 1, 1983): 23–24.

inflationary spiral from developing while productive capacity recovered, then a subsequent deflationary contraction and its attendant economic dislocation could be avoided. Controls, Bowles said, would "provide a basis for a peacetime structure of prices that will assist the attainment of full production." They would be an "instrumentality for assisting an orderly transition," serving to "bridge the dangerous gap between sudden victory and sound prosperity."[40]

This bridge held well enough while the planks were all in place. But once the war ended, Truman's executive orders began removing them—against the advice of Bowles and his allies, who saw the system of controls as mutually self-reinforcing. Rationing measures, controls on wages and controls on capital allocation were all allowed to lapse while price controls remained in place. This engendered stiff political opposition. During the war, labor and consumer groups saw price controls as necessary to keep cost of living down. And as long as wages were frozen as well, major corporate interest groups like the American Bankers Association and the U.S. Chamber of Commerce had no compelling reason to object.[41] But once wage flexibility was granted without a compensating allowance for price increases, capitalists forcefully pushed back. Acquiescing to price controls as a wartime exigency was one thing. Allowing controls to threaten profitability in peacetime was quite another.

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[40] "Postwar Price Control," *The Washington Post*, September 12, 1944; "Control of Prices and Rents Set By Bowles for OPA 'to Bridge Gap,'" *New York Times*, August 16, 1945.
[41] Bartels, "The Office of Price Administration."

Price controls threatened profitability because price ceilings were being squeezed from below by an aggressive labor movement. During the war, workers had largely accepted no-strike clauses imposed on them out of a sense of patriotic duty. Even the Communist Party of the United States of America endorsed a platform of patriotism, productivity and refusal to strike.[42] After V-J day, however, a wave of strikes erupted under the leadership of the CIO. Truman's first response was to allow industry to accede to wage demands only insofar as it would not result in price increases. But this only spread the strike wave further afield, as managers claimed they could not absorb increased labor costs without increasing prices. Collective bargaining subsequently broke down in a range of key industries, most importantly in meat, oil, and steel. Responding with a mixture of carrot and stick, the Truman administration seized refineries and meatpacking plants but attempted to accommodate the more powerful United Steelworkers. Going against Bowles, who recommended seizing the steel plants as well, Truman allowed a significant increase in steel prices in order to bring the strike to an end in February, 1946.[43] Significant as the danger of inflation was, Truman argued that allowing the strikes to bring the economy to a halt was too great a threat to the project of orderly reconversion.[44]

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[42] This is not to say that labor's support for the war effort was unanimous. There were wildcat strikes, particularly toward the end of the war. And Trotskyist groups unsurprisingly dissented from the CPUSA line. But the vast majority of workers, even those who were politically active leftists, saw the war as part of a worldwide struggle against fascism and believed that continuity in war production trumped any more immediate material goals in workplace organizing. See Joshua Freeman, "Delivering the Goods: Industrial Unionism during World War II," *Labor History* 19, no. 4 (1978): 570–93.

[43] Barton J. Bernstein, "The Truman Administration and the Steel Strike of 1946," *The Journal of American History* 52, no. 4 (1966): 791–803.

[44] See "President's Statement on Wages and Prices and His Executive Order," *New York Times*, February 15, 1946.

Sensing blood in the water, congressional Republicans who had long opposed controls now went on the offensive. New Hampshire Republican senator Styles Bridges accused Bowles of "favoritism" toward CIO unions and "putting a cash premium on CIO membership and striking."[45] Staunch anti-labor Minnesota senator Joseph H. Ball joined the chorus, attending a bankers' industry meeting to condemn Bowles and Truman as hypocrites for upholding price controls after allowing the steel settlement. Downplaying the risk of inflation, Ball protested that it was an "economic absurdity" to hold the line on prices while allowing wages to rise. Bowles and the OPA were "thoroughly totalitarian," offering "the same kind of phony economics" that Hitler had foisted on the German people.[46]

Bankers did not need much convincing of this position. Immediately after Truman's retreat on steel price ceilings brought the strikes to a close, the journal of the American Bankers Association published an article arguing that business sentiment had turned strongly against controls. "The best way to resume competition is to resume," the article declared. "It would be better to bring whatever inflation there is right into the open where it can be shot at instead of allowing it to fester in the black market."[47] By May, most members of the U.S. Chamber of Commerce agreed that price control and labor unrest were the main barriers to full production. As one Ohio banker put it at the Chamber's annual meeting, these factors had forced production into "artificial channels": "Eliminate price controls and labor pampering,

[45] Arthur Krock, "In the Nation: A Method That Puts a Premium on Strikes," *New York Times*, February 25, 1946.
[46] "Ball Charges OPA Fosters Hitlerism," *New York Times*, May 11, 1946, sec. Business & Finance.
[47] "Takes Business Poll on Price Control," *New York Times*, 1946, sec. Business & Finance.

let competition and real collective bargaining assert themselves, and you'll have all the production you want."[48]

Autumn of 1946 proved to be the tipping point for controls. After a protracted strike among livestock raisers caused a meat shortage, Republicans in Congress placed blame for the lack of meat squarely on the OPA, helping them to win the midterm elections that year.[49] Following the Republican victory, Truman raised a white flag. He put an immediate end to nearly all wage and price controls, citing lack of public and congressional support.[50] Inflation subsequently spiked, reaching a peak of 25% from July 1946 to July 1947.[51]

Truman publicly reversed course on decontrol once it became clear that the inflationary episode was more than a temporary adjustment. He called an emergency session of Congress to discuss his recommendations for an anti-inflation program, including resumption of selective price and wage controls.[52] Monetary policy was mostly absent from the program, which only vaguely specified that "some restraint should be placed on inflationary bank credit."[53] But Fed Chair Marriner Eccles took this language as an invitation to lobby for legislation which the Board of Governors

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[48] Alan L. Otten, "Production Barriers: Little Businessmen Blame Price Ceilings, Labor Irresponsibility," *Wall Street Journal*, May 1, 1946.
[49] Meg Jacobs, "'How About Some Meat?': The Office of Price Administration, Consumption Politics, and State Building from the Bottom Up, 1941-1946," *The Journal of American History* 84, no. 3 (1997): 910–41.
[50] Joseph A. Loftus, "Truman to State Policy Tomorrow," *New York Times*, November 10, 1946.
[51] Eichengreen and Garber, "Before the Accord," 175.
[52] This was more political maneuvering than a genuine policy goal. White House Counsel Clark Clifford had advised Truman to propose something "absolutely unpalatable to the Republican majority," in order to shift the blame for inflation onto them. Benn Steil, *The Marshall Plan: Dawn of the Cold War* (Oxford, UK: Oxford University Press, 2018), 220.
[53] "Reins Over Prices," *Wall Street Journal*, November 28, 1947.

had been promoting since the war ended: He wanted Congress to grant the Board authority to impose a secondary or "special" reserve requirement of Treasury bills and certificates on commercial banks. This would require banks to hold short-term Treasuries against a specified percentage of their deposit liabilities, in addition to holding the required primary reserves of vault cash and credits in their accounts at the Federal Reserve.

Orderly Government Securities Markets: Eccles' Secondary Reserve Plan

From the beginning, the Eccles plan was deeply unpopular. Bankers universally opposed it, seeing a special reserve requirement as "unnecessary, unworkable, confiscatory, and certain to wreck the banking system as it is now known."[54] President Truman was lukewarm as well. Eccles had initially asked Truman to explicitly include a reference to the special reserve idea in his anti-inflation program, but the reference was cut before publication. Eccles found out later that Treasury Secretary John Snyder, who went on to publicly oppose the plan in Congress, was responsible for the cut.[55] The administration did not say anything specific about its reasons for withholding support for the plan but, given Snyder's ties

[54] George A. Mooney, "Bankers Plan All-Out Resistance To Monetary Control Proposals," *New York Times*, November 23, 1947, sec. Financial.

[55] Eccles claims Snyder privately assured him that while he would not support the plan, he would not raise any objections to it. Nonetheless, Snyder publicly indicated his opposition when he was questioned in Congress. He gave no reason for his opposition, nor any alternative proposal, stating only that he did "not think it would accomplish the purpose to which it is aimed." The business press speculated that the main reason for his opposition was that the Eccles plan would upset the bond market. "Economic Stabilization Aids," § Hearings before the Committee on Banking and Currency, U.S. House of Representatives, 80th Congress, 1st Session (1947), 40; J. A. Livingston, "Business Outlook: Bankers Shy From Eccles Plan," *The Washington Post*, November 30, 1947; Eccles, *Beckoning Frontiers*, 430–31.

to Transamerica (the bank holding company that owned Bank of America at the time), it is plausible that pressure came from banking quarters.[56]

Even within the Federal Reserve System, the secondary reserve requirement proposal was controversial. Allan Sproul, president of the New York Fed, publicly called the Eccles plan "futile" and repeatedly pushed against it FOMC meetings.[57] To Sproul's mind, reintroducing an "element of flexibility and unpredictability" into the short-term end of the interest rate structure (while maintaining the long-term peg of 2.5%), should have been enough to break out of a "frozen" pattern of rates and exert a degree of restraint on credit expansion.

Eccles and the Board of Governors agreed with Sproul that a degree of short-term rate flexibility was desirable but remained convinced that interest rate policy would not be adequate to meet the current inflationary situation. In the Board's view, it would be impossible to stop the expansion of bank credit except with an interest rate increase so extreme that it would "demoralize the entire government securities market." Even hinting that the Fed might raise interest rates enough to restrain credit would likely lead to a "flood of selling." This would put the Fed "under the necessity to support the market and in the process might create more reserves than it would have created through meeting the demands of banks in an orderly market." Eccles was determined to avoid both the inflation and the collapse in bond prices that had followed the end of the first World War. If the need to maintain the peg made

[56] On the connections between Transamerica and the Truman administration, see Eccles, *Beckoning Frontiers*, 443–56.
[57] George A. Mooney, "Eccles' Plan for Reserve Fund Called Futile by Allan Sproul," *New York Times*, 1947, sec. Business.

interest-rate policy unworkable, and direct controls had all but collapsed, a secondary reserve requirement would be the next-best option. It would take away the commercial banks' power to monetize the debt by liquidating Treasury holdings on demand, and thereby constrain credit creation, while still maintaining the nominal price of Treasury debt at or above par.[58]

In the emergency congressional hearings called by Truman to address the inflation problem, positions on the Eccles Plan—both for and against—were grounded in rhetorical distinctions between speculation and real production, between nominal and real value, and between order and disorder. Each side justified its policy stance in these terms, positioning itself as the champion of both orderly markets and the real economy. Disagreement between bankers and the Board of Governors hinged on the question of whether expanding bank credit was a cause or a consequence of price inflation and whether the extension of bank loans fostered growth by financing necessary production, or simply extended purchasing power in a manner that bid up prices without much effect on actual productive capacity. The second crucial point of disagreement was whether the proposal would lead to disorder in the bond markets. Economic productivity and orderly reconversion were political footballs that provided the normative grounding necessary to legitimate policy preferences.

The bankers, represented by FAC president Edward E. Brown, were eager to demonstrate that their loans were firmly on the side of the real economy, not

[58] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, June 10, 1946," 1946, 5–11; Board of Governors of the Federal Reserve System, "Thirty-Third Annual Report of the Federal Reserve Board Covering Operations for the Year 1946," 1947, 6; Economic Stabilization Aids, 293.

inflationary disorder. Bank loans were a passive "reflection of the very high level of business activity and high prices." Expanding bank credit was therefore a "barometer" of inflation, not a cause. The true drivers of inflation, Brown argued, were labor and government. Organized labor was extorting wage demands that consistently outstripped productivity and cost-of-living increases. The excessive demands of organized labor were, in turn, enabled by a condition of "overemployment," which undermined labor discipline. In an overemployed economy, the ease of securing a new job made workers lazy and complacent, which led to a sharp decrease in labor productivity.[59]

The federal government, meanwhile, was spending far too much on housing subsidies, agricultural subsidies and foreign aid. Particularly offensive to bankers, agencies like Fannie Mae, the Farm Credit Administration and the Reconstruction Finance Corporation were extending direct loans that competed with the private banking sector, in addition to making loan guarantees through the Federal Housing Administration. Naturally, the bankers recognized that simply complaining about

[59] Brown's quote is worth reproducing in full: "Personally, I think we have got a condition today of overemployment. I think through large segments of the industry people are not working up to their capacity simply because even if they do not do a full day's work or an honest day's job, they can go out and get a job somewhere else. I think it would be a lot better if there were, perhaps, 1 or 2 percent of the bricklayers of the country who were unemployed. At the present time, bricklayers, at least out our way, are laying three, four hundred bricks a day when they could lay a thousand or more. As long as they can get a job somewhere else, they are taking things pretty easily. If there were sufficient competition in employment so that they would really try to work on the job you might have some unemployment but you would have much more production." Senator O'Mahoney noted that this argument was one that is "customarily made by bankers and bank managers" but brushed it aside. The real problem in the bricklaying industry was material shortages, which left frequently left bricklayers on the job with no bricks or mortar. "Anti-Inflation Program as Recommended in the President's Message of November 17, 1947," § Hearings before the Joint Committee on the Economic Report, 80th Congress, 1st Session (1947), 571–72.

government competition in the loan industry would be a losing argument in Congress. So the FAC argued instead that these agencies were driving inflation by "making loans that the banks refrained from making because of their speculative nature." Where the public sector's reckless, "speculative" lending drove inflation, prudent private bankers limited credit to those areas where it created the real productive capacity necessary for *defeating* inflation. Imposing secondary reserve requirements would thus be "disastrous" for reconversion because it would compel banks "to liquidate sound and necessary loans and thus actually check production." Worse still, limiting commercial banks' autonomy over the composition of their asset portfolio would be a perilous step toward the "socialization of banking." It would "substitute the edicts of a board in Washington for the judgments of the boards of directors of 15,000 banks throughout the country as to the employment of a substantial part of the funds of their banks."[60]

The Federal Reserve's Board of Governors responded to the FAC by arguing that in the current wage-price spiral, it was impossible to distinguish chicken from egg. Expanding bank credit was "both a cause and a consequence" of inflationary pressures. It simultaneously allowed businesses to shoulder increased input costs and provided the monetary incomes that funded higher nominal levels of consumption. No one group was responsible for this spiral—not workers, not industry, not bankers. It was simply the result of the "reliance on the free-enterprise, competitive price

[60] Anti-Inflation Program as Recommended in the President's Message of November 17, 1947, 147–49.

system in a situation where demand, supply, and price are not in equilibrium and where a rise in prices can be prevented only through the maintenance of a harness of controls by Government."

In normal times, the Fed would be able to exercise restraint through contractionary open market operations or increases in the discount rate. But the obligation to maintain the peg took these options off the table. Open-market operations had to be used principally to maintain the pegged yields on Treasury securities; attempts at making open-market purchases to contract the supply of high-powered money would risk depressing bond prices below par. The discount rate, for its part, was ineffective because the commercial banks now held a total of $70 billion worth of government securities that they could sell at or above par on demand whenever they needed reserves. With this enormous stock of assets that could be liquidated on demand, there was no need for them to resort to discount window borrowing at the Fed.[61]

According to the Marriner Eccles, this was the true nucleus of the inflation problem. As long as banks could freely monetize government debt, competitive pressures would oblige them to extend credit well beyond the material capacity of the postwar economy. Direct controls on prices, wages and rents were little more than a band-aid. They could be a useful component of the inflation-fighting campaign, Eccles thought, but they did not "go to the sources of the problem"—the private

[61] Anti-Inflation Program as Recommended in the President's Message of November 17, 1947, 149–51.

monetization of the debt. His secondary reserve requirement plan, in contrast, would "deal with the causes rather than the effects of inflationary pressures."[62]

Notably, no one in the congressional hearings suggested ending the peg, even if many saw it as the primary source of inflationary pressure. While multiple speakers criticized price controls as "communist" and "totalitarian" during the hearings, there was a general consensus that interest rate controls remained indispensable to maintaining order in the bond markets.[63]

By this time, the Federal Reserve and the Treasury had agreed to reintroduce interest rate flexibility at the short end of the maturity spectrum. But the peg on longer securities remained in place, so any flexibility was limited to allowing short-term rates to find a level more consistent with the long-term peg.[64] The long-term peg itself, however, was sacrosanct. As Eccles put it, "Bankers, and certainly the Federal Reserve people, are agreed that the government bond market must be supported and stabilized. Certainly, the Treasury likewise agrees to that."[65] Edward E. Brown of the

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[62] John D. Morris, "Eccles Gives Plan to Curb Inflation by New Bank Rule," *New York Times*, November 26, 1947. Like Bowles, Eccles supported comprehensive direct controls and thought Truman made a mistake in relaxing them too early. He would have preferred that they remained in place longer to allow a restoration of peacetime productive capacity. Eccles, *Beckoning Frontiers*, 409.

[63] For example, in a discussion of controls in the grain trade, Representative Walt Horan (Republican, Washington) noted, "We progressively move in the direction of depositing all social responsibilities in the Government, and we approach an approximation of the very communism that we are fighting in Europe." Anti-Inflation Program as Recommended in the President's Message of November 17, 1947, 392; For other instances of speakers criticizing price controls as "communist" or "totalitarian" see Anti-Inflation Program as Recommended in the President's Message of November 17, 1947, 302, 304, 424, 483.

[64] In July 1947, the Federal Reserve, with the Treasury's approval, removed the 0.375% peg on 13-week bills. Weeks later, the rate on bills was approaching the pegged nine- to twelve- month certificate rate of 0.875%. Meltzer, *A History of the Federal Reserve, Volume 1*, 643.

[65] Anti-Inflation Program as Recommended in the President's Message of November 17, 1947, 576, 598.

FAC confirmed this unequivocally, stating that "it was better to have some inflationary effects than to fail to support [bond prices]."[66]

Despite professions of support for the peg from all sides, the FAC and the Board of Governors each attempted to discredit the other by accusing them of undermining it. Eccles campaigned against the bankers by arguing that their attempts to block the special reserve plan could only mean that, despite their protestations to the contrary, bankers were determined to see rates go up and support dropped. They were not offering any other viable alternative for inflation control, so what other conclusion could be reached?[67]

Brown, for his part, argued that Eccles' proposal itself would make the peg untenable. Requiring commercial banks to hold short-term Treasury bills and certificates against their deposits would generate panic in the bond market. In order to fund the purchases of the bills and certificates necessary to meet the new requirements, banks would sell their long-term Government bonds, leading to a "disastrous wholesale selling of Governments, not only by banks." Even though the Federal Reserve would buy the long-term bonds necessary to maintain the peg, the sheer scale of purchases that would be needed to offset the commercial banks' sales would cause anxiety that the Fed might decide to drop or lower the peg rather than

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[66] Anti-Inflation Program as Recommended in the President's Message of November 17, 1947, 575. Brown's statement reflected the view of the majority of the bankers on the FAC. See, for example, the Council's discussion of the peg in "Minutes of Meeting of the Federal Advisory Council, September 19-21, 1948," 1948, https://fraser.stlouisfed.org/files/docs/historical/nara/fac_minutes/fac_19480919.pdf.

[67] "Banks Want Reserve Board to Stop Supporting U.S. Bonds So Interest Rates Can Go Up, Eccles Charges," *Wall Street Journal*, December 5, 1947.

continue to monetize the debt. In the end, Brown argued, the Fed would not be able maintain the peg if it wanted to avoid monetizing the entire outstanding long-term debt.[68]

Brown's invocation of financial disorder might have been more self-interested speechifying than genuine fear. (Eccles certainly thought so. As far as he was concerned, if the secondary reserve requirement were imposed gradually, there was "no reason why the transition could not be accomplished in an entirely orderly manner.")[69] But the idea that the postwar bond markets were fragile and needed more solicitous protection than labor markets or consumer goods markets did was taken very seriously by bankers in this period.

Even Allan Sproul, a champion of New York bankers who had successfully pushed inside the Fed for more flexibility in short-term rates, warned that fully restoring market pricing for Treasuries would have catastrophic effects. In a speech to the New York State Bankers Association soon after the congressional hearings on the Eccles Plan, Sproul cautioned against the dangers of premature liberalization in the money markets:

> Our critics say that if a drastic fall in market values of government securities is the price we must pay to bring about deflation now, and prevent a worse 'bust' later, we should pay it. I say we can't bring about deflation by general credit action, in this situation, unless we bring about such an indiscriminate reduction in consumers' disposable income as to threaten the kind of disaster we are trying to avoid. … It might still be argued, I suppose, that abandoning our support of the Government security market could be encompassed within our modest

[68] Anti-Inflation Program as Recommended in the President's Message of November 17, 1947, 576–79.
[69] Anti-Inflation Program as Recommended in the President's Message of November 17, 1947, 613.

> program and that only moderate declines in security prices would occur, that Government securities would reach a natural level, and that everything would then be much better. With markets as delicately balanced as our contacts and experience indicate the present markets to be, I cannot agree with this opinion or judgment. Without our support, under present conditions, almost any sale of Government bonds undertaken for whatever purpose (laudable or otherwise) would be likely to find an almost 'bottomless market' on the first day support was withdrawn. A rapid descent in prices going far beyond any question of the Government's credit (which is high) or relative interest rates would be most likely. Uncertainty would almost surely persist for a considerable time after such a development, the Government's necessary refunding operations would be made very difficult, and private security markets would be seriously affected. In such circumstances, there could easily be a flight of cash out of both markets, and price changes so erratic as to make new financing almost impossible for some time, with what ramifications I do not like to contemplate. In the face of a Federal debt of over 250 billion dollars … we can't treat the Government security market as we might a million issue of the XYZ corporation. I am not a believer in more and more Government controls, certainly, but this is one control which I would not want to try to let go, voluntarily, under present circumstances.[70]

What Sproul was arguing, in short, was that the price mechanism was temporarily unable to reflect economic fundamentals (the "Government's credit") in the bond market. Maintaining orderly conditions and market liquidity was impossible without the long-term peg.

Sproul's speech reflected the general sentiment of the financial sector in 1948. While challenges to pegged markets occasionally cropped up from some corners of the financial services industry, the predominant opinion was that the long-term peg

[70] Speech given by Allan Sproul at the January 26, 1948 meeting of the New York State Bankers Association, reproduced in "Minutes of Meeting of the Federal Advisory Council, February 15-17, 1948," 1948, https://fraser.stlouisfed.org/files/docs/historical/nara/fac_minutes/fac_19480215.pdf; "Conservative Monetary And Fiscal Program Is Favored by Sproul," *Wall Street Journal*, January 27, 1948.

had to be maintained. President of the American Bankers Association Joseph M. Dodge, for example, expressed concern about the "inflationary headaches" that the peg presented for bankers, but thought that dropping it would be a "dubious expediency." Another former ABA president, Frank Rathje, suggested that the rank-and-file members of the organization broadly supported the peg. Allowing bonds go below par would "provoke a storm," he argued. Any move away from direct bond market support would have to be accompanied by "a reasonable assurance to the many parties in interest that Government bonds would be salable in a free market at or near par."[71] In other words, bankers may have desired an eventual reconversion from a pegged to a "free" market. But they wanted it only to the extent that such a market could guarantee substantially the same outcome as the peg itself. A successful transition out of the peg would have to ensure that market liquidity would be guaranteed. This problem, to which we will return in the next chapter, would drive much of the political drama within the Federal Reserve in the coming years.

Why Did Bankers Oppose the Eccles Plan?

Bankers opposed price controls, opposed the IMF, and opposed robust full employment legislation. They opposed every aspect of orderly reconversion, except

[71] George A. Mooney, "Banks Held Losing Lead As Lenders," *New York Times*, October 3, 1948, sec. Business; Harry T. Rohe, "Banker and Insurance Head Voice Conflicting Views on Issue of Government Support of Its Bonds," *Wall Street Journal*, September 28, 1948.

one: the peg. As we have established, the peg seemed necessary to bankers as a protection against the danger of speculative disorder that could lead to a collapse in asset values and a major capital loss for banks. But if the bankers' reason for supporting the peg is clear, it is worth examining in greater detail why they opposed Eccles' secondary reserve plan. The plan, after all, was aimed to control inflation while avoiding the financial disorder of dropping the peg. In theory, bankers should have been at least as concerned with the possibility of inflation undermining the real value of their assets as they were about financial disorder undermining those same assets' nominal value. At first blush, then, it is not entirely clear why bankers should have been so vehemently opposed to a secondary reserve requirement.

Another factor that makes bankers' opposition somewhat surprising is that the Eccles plan was, in a sense, already a compromise position that ceded much ground to the banks.[72] At the end of the war, there was increasing recognition among economists that the payment of interest on public debt to bank holders was little more than a subsidy for banks. With the peg in place, interest on marketable Treasury debt could not be justified as compensation for parting with liquidity or taking on capital risk. For banks, Treasuries were simply a new form of interest-bearing excess reserves. Widespread acknowledgement of this fact paved the way for a multitude of

[72] In his memoir, Eccles wrote, "The opposition of banking leaders to the use of measures that could check bank-credit inflation was unreasonable. They seemed to forget that in order to assist in war financing the government provided the banking system with additional reserves, which enabled the banks to buy government securities; that this created new deposits in the banks; and that banks also had the benefit of interest received on the government securities they held and would continue to hold for an indefinite period. Assent to a temporary limitation on the further use of the funds was not too much to ask of them." Eccles, *Beckoning Frontiers*, 428.

debt management schemes that sought to reduce or eliminate public interest payments to banks. Such proposals often involved the Federal Reserve monetizing bank-held debt, and then imposing high primary reserve requirements to sterilize the monetary effects of the purchases (anywhere from 80-100%).[73] In less technical language, these proposals argued that the Federal Reserve should eliminate the bulk of the public debt by turning it into money, and then keep the money out of circulation by legally requiring banks to hold it against deposits. Banks would then be forced to find ways to make a profit without relying on passive income from the Government.[74] Many of these proposals were similar in spirit to the one Texas congressman Wright Patman had introduced during the war. As discussed in the previous chapter, Patman had consistently pushed for the Fed to monetize the debt at zero percent interest rather than continuing to subsidize banks. The fact that this sort of idea was gaining traction in flagship economics journals confirmed the fears that both Eccles and the FAC had privately expressed: Patman could no longer be dismissed as a crank.

For banks, higher primary reserve requirements were to be avoided at all costs. Since reserves are a non-interest-bearing asset, reserve requirements are effectively a tax on bank earnings. The Eccles plan was a compromise because it would have allowed for rigorous inflation control measures without increasing

[73] See, e.g., David McCord Wright, "Interest-Free Deficit Financing: A Reply," *The Quarterly Journal of Economics* 58, no. 4 (1944): 637–46; Henry C. Simons, "Debt Policy and Banking Policy," *The Review of Economics and Statistics* 28, no. 2 (1946): 85–89; Simeon E. Leland, "The Government, the Banks and the National Debt," *The Journal of Finance* 1, no. 1 (1946): 5–26; Jesse V. Burkhead, "Full Employment and Interest-Free Borrowing," *Southern Economic Journal* 14, no. 1 (1947): 1–13.
[74] Henry C. Simons suggested, for example, that deposit-taking banks should make up for the lost income with service fees. See "Debt Policy and Banking Policy."

primary reserve requirements. Imposing a requirement that banks hold Treasury securities—rather than just reserves at the Fed—was a way to allow banks to keep the earnings from their Treasury holdings even as those holdings were rendered illiquid. Eccles took this position because he remained convinced, as he was during wartime, that drastic increases in primary reserve requirements to sterilize Federal Reserve monetization of the debt would bankrupt the commercial banks.[75] Clearly, Eccles had no intentions of socializing the banks, as his critics in the banking industry charged. His secondary reserve plan was intended precisely to subsidize the private banks and allow them to weather the extraordinary measures that were needed to control inflation pressures until the production could adequately recover. Temporarily restricting commercial banks' use of the funds (funds that were, after all, initially granted to them by the Fed in order to support the war effort) was a matter of orderly reconversion, not socialization or expropriation.

Bankers were nonetheless convinced that the Eccles plan was the first brick on the road to serfdom.[76] Why? I suggest that it was because the institutional power of the private banking system depended on the *liquidity* of their Treasury portfolios, and the value of the embedded financial optionality that this provided. The liquidity of

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[75] See Eccles testimony in "Direct Purchases of Government Securities by Federal Reserve Banks," § Hearing Before the Committee on Banking and Currency, House of Representatives, 80th Congress, First Session (1947), 36.

[76] Friedrich Hayek's *Road to Serfdom* enjoyed considerable circulation among bankers and other business elites following its 1944 publication in the United States. On his national lecture tour to support the book, he was "feted by chambers of commerce and bankers associations," and his book was a frequent topic of discussion at bankers' conventions. See Marquis Childs, "Washington Calling: Hayek's 'Free Trade,'" *Washington Post*, June 6, 1945; "Deficits Are Political," *New York Herald Tribune*, April 15, 1945; Theodore Rosenof, "Freedom, Planning, and Totalitarianism: The Reception of F. A. Hayek's Road to Serfdom," *Canadian Review of American Studies* 5, no. 2 (1974): 149–65; Friedrich A. Hayek, *The Road to Serfdom* (Chicago: University of Chicago Press, 1944).

Treasury holdings was crucial for banks because it allowed them to enjoy the upside of the business cycle while they were shielded from the downside. The ability to adjust their portfolios on demand between a risk-free store of value (Treasuries) and higher yielding risk assets (loans) was at the core of their business model. If profitable opportunities for private loans presented themselves in an upswing, Treasuries could be liquidated. If private loan demand collapsed in a downswing, the modest return on Treasuries provided banks with a safe alternative investment to private loans, and a way to avoid contracting their balance sheets. Bankers' vision of orderly reconversion, then, entailed maintaining the peg—which made Treasury securities essentially as liquid as cash—until the private demand for bank loans had recovered enough to allow banks to profitably liquidate their portfolios.

For bankers, expropriating liquidity seemed nearly as bad as expropriating their bond holdings altogether. It removed the optionality and turned Treasury holdings into just another investment asset. But bankers didn't want to be forced to hold Treasury securities to maturity. Their yield was too low relative to other investments. Rather, they wanted to use them as a savings account—a store of value that could be tapped more-or-less on demand without penalty. For all these reasons, bankers could not countenance the secondary reserve plan. They were on board with Eccles when he preached inflation control through fiscal austerity, but in this case his hawkishness was a bridge too far.

In the end, Eccles did not have the political capital to take on the banking industry. Not only did his plan fail to make it through Congress, but he was

immediately ousted from the chairmanship of the Federal Reserve after he attempted to push it through. Just a month after the hearings on the Eccles plan concluded, President Truman declined to reappoint Eccles as chair of the Board of Governors, replacing him with Thomas McCabe—CEO of the Scott Paper Company and one-time director of the Philadelphia Fed. (Eccles did not, however, resign from the Board, and retained a seat as Vice Chair until his retirement in 1951).

While Truman never explained his motivation for demoting Eccles, journalists at the time believed the decision to be a direct consequence of Eccles' promotion of the special reserve plan, which he had pursued despite the opposition of the Treasury Secretary and the banking industry.[77] The *New York Times* reported that Eccles' demotion was "greeted with satisfaction by most bankers" since it "insured that Mr. Eccles' special secondary reserve proposal will not be pushed as vigorously as in the past." One bank lobbyist was quoted condemning Eccles for "maintain[ing] a dictatorial position, sponsoring radical proposals, such as the special secondary reserve plan, and neglecting to consult with leaders in the banking community."[78] Bankers were hopeful, moreover, that the ousting of Eccles from the leadership position meant that the "Sproul view," more in line with the sentiment of the banking community, had won out in the Fed.[79]

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[77] See, e.g., "Another New Dealer Gets the Truman Ax," *Los Angeles Times*, January 29, 1948; Associated Press, "McCabe Replaces Eccles As Chair of FRB," *The Christian Science Monitor*, January 27, 1948, sec. Business/Finance.
[78] Anthony Leviero, "Eccles Is Demoted in Federal Reserve By Truman's Order," *New York Times*, January 28, 1948.
[79] George A. Mooney, "Eccles' Demotion Puzzles Bankers," *New York Times*, February 1, 1948, sec. Business.

Eccles, for his part, believed that he was demoted less because of his plans for secondary reserve requirements and more because of his pursuit of antitrust action against the Transamerica, a major bank-holding company that was steadily consolidating control over commercial banks in the Western United States—one, moreover, that had personal connections to the Treasury Secretary.[80] Evidence on this point is inconclusive, but it is probable that Eccles was correct.[81] Even so, the onslaught of criticism from the banking community over the special reserve plan would certainly have made Eccles an easier political target. And whatever the proximate cause for the demotion was, it ultimately served the bankers' purpose: Truman had sidelined Eccles and replaced him with McCabe, a conservative Republican whom most bankers expected to oppose the secondary reserve plan.[82]

The Afterlife of the Eccles Plan

Even with Eccles pushed to the margins, bankers still had cause for concern about reserve requirements. Truman had declined to reappoint Eccles, but he had indicated in his January 1948 Economic Report that the Board of Governors' proposal on bank reserve requirements should "be given close study by Congress."[83] This

[80] Eccles, *Beckoning Frontiers*, 443–56.
[81] This is the conclusion reached by Sandra Weldin in her dissertation on the relationship between Eccles and Transamerica. Sandra J. Weldin, "A.P. Giannini, Marriner Stoddard Eccles, and the Changing Landscape of American Banking" (Dissertation, Denton, TX, University of North Texas, 2000), 178, https://digital.library.unt.edu/ark:/67531/metadc2489/:
[82] The *Wall Street Journal* noted that McCabe was "general regarded as a conservative banker" and was "said to be opposed to the Eccles plan." "Eccles to Be Replaced as Reserve Board Chair February 1," *Wall Street Journal*, January 28, 1948.
[83] "The Economic Report of the President," January 14, 1948, 49.

statement might have stemmed more from a desire to shift the blame for inflation on an obstructionist Congress than from a genuine interest in the proposal. Certainly, the appointment of McCabe would seem to indicate as much. On the other hand, there was a definite split within the Truman administration on the matter. The Keynesian members of President Truman's Council of Economic Advisers, Leon H. Keyserling and John D. Clark, both strongly supported the secondary reserve plan, even if Treasury Secretary Snyder did not.[84] Truman may have been speaking out of both sides of his mouth rather than taking a firm position.

In any event, the possibility that the secondary reserve proposal might rise from the dead haunted bankers. With Eccles stubbornly continuing to push the plan even after his demotion, the Federal Advisory Council was on high alert. In the April 1948 FAC meeting, W. Randolph Burgess, an executive at the National City Bank of New York and former president of the American Bankers Association, warned newly appointed Fed Chair Thomas McCabe that supporting Eccles on the secondary reserve plan would raise a "political problem with banks" that might "jeopardise his leadership." Following this thinly veiled threat, Burgess advised him to publicly distance the Board of Governors' policy stance from Eccles.[85]

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[84] In congressional hearings the following year, Clark and Keyserling testified that they "heartily supported Mr. Eccles' proposal to make it possible for the Federal Reserve Board to exert considerable restraint upon the expansion of credit in 1947 and 1948 by giving them secondary reserve requirements to be represented in frozen Government securities." "Monetary, Credit, and Fiscal Policies," § Hearings before the Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the Economic Report, 81st Congress, 1st Session (1949), 538.

[85] "Minutes of Meeting of the Federal Advisory Council, April 25-27, 1948," 1948, 33, https://fraser.stlouisfed.org/title/minutes-recommendations-federal-advisory-council-1152/meeting-documents-april-25-27-1948-1706.

McCabe heeded Burgess' warning and dropped the secondary reserve plan entirely. This put him in a difficult position, however. Without the Eccles plan, and with the peg in place, the Fed's ability to implement credit policy was severely hampered. Consequently, the Board of Governors leaned heavily on changes in the primary reserve requirement over the next few years. Reserve requirement changes had historically been infrequent and treated as the bluntest instrument of monetary policy. But from 1948 to 1951, the Board of Governors attempted to use them in quite a different fashion, turning them into the primary instrument of monetary policy and making no fewer than nineteen changes. The Board also successfully lobbied Congress for higher ceilings on primary reserve requirements. But just as Eccles had predicted, these changes in required reserve ratios were largely ineffective. In order to meet increased reserve requirements, banks would simply sell their Treasury securities to the Fed. So the end result of higher primary reserve requirements was not credit constraint, but simply a transfer of interest earnings from commercial banks to the Federal Reserve.[86]

The other result was intense resentment from the banking sector. According Alfred H. Williams (President of the Philadelphia Fed), repeated reserve requirement increases in 1948 had severely damaged the Fed's standing among bankers: "Bankers are restive; they are skeptical; they are querulous; their morale is low. Some feel aggrieved; feel that they are singled out unduly for attention in this matter of

[86] Meltzer, *A History of the Federal Reserve, Volume 1*, 658–67.

regulation and control."[87] The 1948 meetings of the Federal Advisory Council bear this point out. Reserve requirements were referred to by FAC members as a "meat axe."[88] Using them to target inflation, the bankers thought, was like "shoot[ing] a snow bird with a cannon." Rather than suggesting an alternative method of inflation control, however, the FAC simply argued that inflation was not a problem. No one was sure which direction the economy was headed, so the burden placed on the banks by the Board of Governors' hawkish stance was unnecessary and inequitable. What's more, requiring banks to hold a greater proportion of non-earning assets against deposits would force them to make riskier, speculative loans in order to compensate for the loss of income.[89]

Bankers in this period felt, to some extent, that they could afford to step out of their customary role as inflation hawks. With full employment legislation defeated, and a fiscally conservative presidential administration running budget surpluses, inflation control measures posed a greater political threat to banks than inflation itself. Bankers wanted pegged, liquid markets for their bond portfolios that would allow them to shift out of governments and into more profitable loans with a minimum of risk. This was their vision of orderly reconversion. Inflation remained a secondary concern.

But the strategic goals of the banking sector began to shift toward the end of the 1940s and the beginning of the 1950s, as the Federal Government's short-term

[87] Monetary, Credit, and Fiscal Policies, 58–59.
[88] "Minutes of Meeting of the Federal Advisory Council, February 15-17, 1948," 4.
[89] "Minutes of Meeting of the Federal Advisory Council, April 25-27, 1948," 29.

project of orderly reconversion morphed into a longer term—and much more costly—project of containing global communism. As we will see in the next chapter, this changed the dynamics between the banking sector, the Federal Reserve, and the Treasury—changes that culminated in end of the peg in 1951. Half a decade after the demise of the price control regime and the defeat of the employment bill, reconversion would finally arrive in the bond markets.

5. LEAVING THE PEG: THE COLD WAR AND THE ROAD TO THE TREASURY-FEDERAL RESERVE ACCORD OF 1951

In December 1950, Federal Reserve Chair Thomas McCabe was invited to speak at the Newcomen Society of America, an organization comprised of powerful bankers and industrialists that was dedicated to promoting free enterprise.[1] McCabe began his address on "The Role of Central Banking in our Free Enterprise Society" with two questions that he believed were of "supreme importance … to adherents of human freedom throughout the world." The first was "how can we build up our defenses to meet the threat of world aggression by the Communist forces?" The second was "how can we maintain the value of the American dollar?" The answers to these questions, he argued, were deeply entangled. Financing defense required a sound dollar—as did world peace.[2]

McCabe's comments at the Newcomen society capture a significant shift in the political winds of the time. In the immediate postwar period, bankers lobbied to fight inflation primarily through fiscal means that did not directly affect their operations. They wanted less federal spending, less competition from government agencies and higher unemployment. But as Cold War spending started to take off,

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[1] *TIME* magazine wrote in 1952 that the Newcomen society "probably has the largest and most lustrous roster of big business names in the U.S. Among its 12,200 members are the presidents of all the railroads running into the New York area, the chairmen of most of Manhattan's large banks, the nation's top leaders in oil, aluminum, steel, rubber, advertising and almost all other industries." "Public Relations: The Newcomeners," *Time*, July 21, 1952.

[2] Thomas B. McCabe, "The Role of Central Banking in Our Free Enterprise Society: An Address before the Alabama Dinner of the American Newcomen Society," December 12, 1950, https://fraser.stlouisfed.org/title/statements-speeches-thomas-b-mccabe-447/role-central-banking-free-enterprise-society-7761.

fiscal retrenchment seemed increasingly unlikely. Republicans and southern Democrats could be readily enlisted to fight off the perceived threat of an inflationary full employment bill, but there were simply too many anticommunist hawks in Congress for bankers to make a successful argument against Cold War spending. The Marshall Plan and the Korean War helped Federal Reserve officials make the case to initially reluctant bankers that the time had come to abandon the peg. If budget surpluses no longer appeared to be a viable route for inflation control, the Fed's capacity to impose monetary restraint would have to be restored.

Moving away from the peg required a protracted political campaign in which the Federal Reserve, led by Thomas McCabe, Allan Sproul and Marriner Eccles, enlisted congressional support to overcome resistance in the Truman Administration—especially from Treasury Secretary Snyder and Truman's Council of Economic Advisers. Two rhetorical strategies were integral to the success of this campaign. First, proponents of an exit from the peg had to make the case that it would be an *orderly* exit. The central argument for exiting the peg was that interest rate flexibility was necessary to fight inflation. But Fed officials had to make it equally clear that chaotic price swings or speculative collapses in the bond market could not be tolerated. They had to show that they understood that such volatility could undermine the United States' position in the global war against communism. The objective would thus be a return to orderly markets—neither disorderly, "free" markets, nor inflationary, pegged markets. Disentangling "order" from the peg, which had been synonymous in the public imagination for nearly a decade, Fed officials

now returned to an earlier concept of orderly markets as markets in which general measures to guarantee liquidity and limit volatility were undertaken but no particular price level or yield curve would be supported.

The second rhetorical strategy used to promote the Federal Reserve's position was one that leveraged Cold War ideology to equate regulatory alternatives to flexible money markets with communism and totalitarianism. Economic controls that were "direct," "specific" and "selective" (such as price controls) were antithetical to the free market. "General" credit control, on the other hand—namely, monetary policy achieved through open market operations—was consistent with a free enterprise system. (Reserve requirements, though technically a general control, were often lumped with price controls as a totalitarian measure that undermined the free market.)

The peg was finally ended with the Treasury-Federal Reserve Accord of 1951. This informal agreement between the two agencies brought the public discord over interest rate flexibility to an end and gave the Fed new leeway to steer money market conditions independently of the Treasury's debt management program. The Accord—which has been studied extensively by political scientists and economic historians—is conventionally characterized as the "birth of the modern Fed," a pivotal turning point that established the Fed's independence, allowing it to focus on inflation control rather than supporting the fiscal priorities of the government. Scholars have also

argued that the Accord marked the birth of "a viable free market in government securities whose stability did not require Fed intervention."[3]

In recent scholarship, the idea that the Accord established "central bank independence" in the United States has been subject to extensive critical reappraisal, with some authors going so far as to question the very coherence of the concept of independence.[4] However, the other side of the conventional narrative—the idea that the Accord marked a transition from a system of administered prices to a free market in government securities—remains largely uninterrogated. This chapter argues that the story of a transition to free markets obscures the significance of the Fed's continued interventions in the market for government debt. As Fed officials repeatedly stressed in public statements, "free" markets were never the goal. Orderly markets were. The Accord did not signal a withdrawal from market support, in other words. In fact, the opposite was true. The very success of the Federal Reserve in achieving interest rate flexibility was predicated on its ability to convince bankers and politicians that it would limit market volatility and guarantee liquidity.

The Marshall Plan, the 1948 Election, and Bankers' Evolving Attitudes on the Peg

[3] Robert L. Hetzel and Ralph Leach, "After the Accord: Reminiscences on the Birth of the Modern Fed," *FRB Richmond Economic Quarterly* 87, no. 1 (2001): 58; "Treasury-Federal Reserve Accord - Background," Federal Reserve Bank of Richmond, accessed December 8, 2020, https://www.richmondfed.org/publications/research/special_reports/treasury_fed_accord/background.
[4] See, e.g., Conti-Brown, *The Power and Independence of the Federal Reserve*; Binder and Spindel, *The Myth of Independence*; Moe, "Marriner S. Eccles and the 1951 Treasury-Federal Reserve Accord: Lessons for Central Bank Independence"; Thomas F. Cargill and Ferald P. Jr. O'Driscoll, "Federal Reserve Independence: Reality or Myth," *Cato Journal* 33, no. 3 (2013): 417–35; Epstein and Schor, "The Federal Reserve-Treasury Accord."

The Treasury-Federal Reserve Accord was a product of the Cold War. This is true in both an ideological sense (debates surrounding the Accord often hinged on the integrity of the "free enterprise system") and a practical sense (the fiscal strain of Cold War expenditures contributed to political pressure to abandon the peg). To trace the historical roots of the Accord, then, we begin with an examination of the escalating Cold War tensions that shaped debates on European reconstruction.

Orderly reconstruction of Europe was the foreign policy counterpart of orderly reconversion at home. When Harry S. Truman took office, he continued Roosevelt's commitment to providing aid for European reconstruction. Where Roosevelt was interested in building a postwar international order that included the Soviet Union, however, Truman disowned Roosevelt's vision of a unified world in favor of a bipolar one.[5] Over the years, Truman's reconstruction program became increasingly direct in its hostility toward the Soviet Union. His postwar foreign policy agenda was unmistakably engineered to provide enough foreign aid to Europe to minimize the threat of political disorder—specifically, labor unrest and receptivity to Soviet Communism—while its productive capacity was rebuilt. As the line dividing the capitalist from the communist world hardened, Truman sought nothing less than "an American rescue of the European capitalist state."[6]

Bankers, despite strong anticommunist convictions, were immediately suspicious of this project. The crux of the disagreement was whether provisions for

[5] Steil, *The Marshall Plan*, xii.
[6] Sam Gindin and Leo Panitch, *The Making Of Global Capitalism: The Political Economy Of American Empire* (New York: Verso, 2013), 89.

orderly reconstruction of capitalist Europe would actually contribute to a return to capitalist market discipline, or whether the foreign aid program would amount to little more than "coddling socialism" in the social democratic economies of Western Europe.[7] These anxieties mounted as the Truman Administration began to promote the Marshall Plan, a program that would eventually transfer some $13.2 billion in aid to Europe between 1948 and 1952—more than 1% of total U.S. GDP at the time and more than 8% of the cumulative federal budget during those years.[8] As with their opposition to the IMF, discussed in the last chapter, the banking lobby argued that the Marshall Plan was more likely to enable spendthrift "socialist" governments than to spur real productivity growth in Western Europe. Bankers thought that foreign aid did not have enough strings attached to guarantee that capitalist market discipline would be imposed in recipient countries. In such circumstances, the transfer of dollar balances abroad could provide little else than an "automatic guarantee of … advancing hordes of inflation."[9] Simply putting dollars in the hands of immiserated Europeans would likely lead to domestic inflation in the United States as dollar balances returned across the Atlantic to bid up U.S. exports.

Republican New York Governor Thomas Dewey attempted to capitalize on this kind of fear in his 1948 presidential campaign against Truman. The Truman

[7] The quote is from the director of the Bankers Trust Company of New York, quoted in Kirshner, *Appeasing Bankers*, 127.
[8] In 2016 dollars, this would be equivalent to $130 billion. As a proportion of GDP, from 2012-2016, it would be worth $800 billion—roughly the size of the financial bailout of 2008. Steil, *The Marshall Plan*, 342. Percentage of Federal budget calculated from "Historical Tables," The White House, accessed January 8, 2021, https://www.whitehouse.gov/omb/historical-tables/.
[9] The quote comes from a statement issued by the American Bankers Association. Quoted in Kirshner, *Appeasing Bankers*, 125.

administration's "profligate waste of money" threatened to bring "ruinous inflation," Dewey intoned.[10] Elliott V. Bell, New York Superintendent of Banks and Dewey's chief economic adviser, made more explicit overtures to bankers, appealing to their sense of fiscal rectitude to make the argument against European aid. The United States "must help to bring about an orderly recovery in western Europe," he said. "But in giving this help, our country might well take the attitude of a prudent banker who is consciously making a rescue loan. Such a loan is not likely to be either unlimited or unconditional." Bell continued that it was not a shortage of dollars that was plaguing Europe, but a lack of production. What was really needed was efficiency and elbow grease—something that the "socialist" governments of Western Europe were hardly likely to encourage.[11]

Such polite objections to European aid were bolstered by House Republicans, who were willing to make more bombastic denunciations of the president. Clare Hoffman, a rabid anticommunist and outspoken isolationist, argued that the Marshall Plan was little more than a pretext for a dictatorial power grab by the Truman. While Truman was busy "yelling about communism abroad," his attempts to suppress domestic inflation with rationing, price control and "regimentation" (rather than fiscal retrenchment) were introducing communism "into the very heart of America." Billions of U.S. dollars sent to Europe were being "poured down a rat hole." At best,

[10] "Dewey Attacks Truman Regime as Spendthrift," *Los Angeles Times*, March 5, 1948.
[11] The Associated Press, "Dewey Aide Asks Cautious Foreign Help," *The Washington Post*, September 25, 1947.

the aid might extend the "false prosperity" of the war economy, but this would inexorably lead to "a depression as disastrous as any we suffered thru [sic]."[12]

By mid-1948, Dewey was leading in the polls and Truman was becoming ever more unpopular on Wall street. Running on an inflation-fighting platform, Truman repeatedly reintroduced proposals in Congress to enact a wide range of direct controls on prices, wages and allocation. Importantly, he now also publicly embraced Eccles' secondary reserve plan and supported higher primary reserve requirements when the Eccles plan failed to make it through Congress. As discussed in the previous chapter, such programs were anathema for bankers. They were hopeful that a Dewey victory in November would lead to an inflation-control program more congenial to their interests. Opposed both to an "exclusively monetary" approach to inflation and to Truman's program of direct controls, bankers were keen to hear whether Dewey's focus on fiscal retrenchment might offer a way out of the inflationary morass without hurting their bottom line.[13] Rumors that Allan Sproul would be Dewey's pick for the next Fed chair helped to bolster the idea that Dewey would oppose the kind of heavy-handed regulatory approach that Eccles and Truman advocated.[14]

For all these reasons, Dewey's surprise defeat in November was a serious blow. The mood in the December convention of the American Bankers Association following the defeat was tense, as members read the election results a referendum on

[12] "Hoffman Hits Europe Aid as 'Dictator' Bid," *Chicago Daily Tribune*, January 4, 1948.
[13] George Mooney, "Bankers Anxious over U.S. Policies," *New York Times*, August 29, 1948, sec. Financial.
[14] Robert Fetridge, "Along the Highways and Byways of Finance," *New York Times*, September 12, 1948, sec. Financial.

Truman's anti-inflation program. In their view, this meant that banks would likely continue to serve as a "scapegoat" for an inflation that was all-but-inevitable after nearly a decade of war finance. Higher reserve requirements, declining bank profits and heavier regulation were all on the horizon.[15]

Many bankers were still convinced at this point that dropping the peg would be too risky to venture. The Federal Advisory Council, for example, advised the FOMC not to "rock the boat" on its support policy for the government securities market until the economic trends following Truman's electoral victory became clearer.[16] But opinion in the financial community was starting to turn. Even before Dewey's defeat, a few prominent voices had come out publicly against the peg, notably president of the Equitable Life Assurance Society Thomas Parkinson and J.P. Morgan chair Russell Leffingwell. Both blasted the consensus position of the American Bankers' Association that the peg was necessary for financial stability. Likewise, both stressed the dangers of inflation.

Parkinson was particularly harsh in his condemnation of commercial banks for their habit of unloading long-term bonds on the Fed at the pegged rate in order to invest in higher-yielding loans. This resulted in an explosive growth of the money supply through the monetization of Treasury debt. The only solution, Parkinson contended, was ending the peg:

> There can be no practical move against inflation until the Federal Reserve Board is willing to stop pegging the price of Government

[15] George Mooney, "Bankers Expect Problems to Grow," *New York Times*, December 19, 1948, sec. Financial.
[16] "Minutes of Meeting of the Federal Advisory Council, November 14, 1948," 1948, 43, https://fraser.stlouisfed.org/files/docs/historical/nara/fac_minutes/fac_19481114.pdf.

> bonds … It is all right to watch the market, but it is not all right to peg it at a price that encourages bondholders to dump their bonds on the Federal Reserve any time they want to and put the proceeds into something that will earn them more.[17]

Parkinson, as an insurance executive, was easy for bankers to dismiss. Throughout 1948, banks and insurance companies had been passing the buck for inflation back and forth, mutually blaming each other for recklessly cashing out long-term Treasury holdings and monetizing the debt. The fact that Parkinson's hardline stance on Federal Reserve support policies was not widely held even within the insurance industry made his vocal opposition even easier to brush off.[18]

Russell Leffingwell, on the other hand, was extremely influential among bankers. His line of argumentation was more attuned to bankers' specific concerns and thus more effective. In October 1948, Leffingwell penned an article for *Fortune* magazine, urging bankers to weigh the costs of the peg against its supposed benefits. The peg opened the doors to further reserve requirement increases, Leffingwell

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[17] "Parkinson Assails Pegging U.S. Bonds," *New York Times*, November 11, 1948, sec. Financial. This specific quote is from after Dewey's election, but Parkinson had been publicly criticizing the peg throughout 1948. See, e.g. "Parkinson Sees Business Banks Under 'Political' Domination," *New York Times*, September 28, 1948, sec. Financial.

[18] Parkinson denied that insurance companies were responsible for inflation, shifting the blame onto the Federal Reserve and the commercial banks. The FAC, in response, noted that it was "concerned with respect to the selling of government securities by insurance companies." Burgess argued in the same FAC meeting that "Much of the inflation today is in farm prices, real estate and capital goods projects, and much of it is financed by the sale by insurance companies of government securities. A great deal more inflation is resulting from the sales of governments and relending of the funds by insurance companies than from bank credit." Another FAC member, J.T. Brown, went so far as to suggest eliminating the peg for nonbank holders like insurance companies, while retaining it for commercial banks. Later in the meeting, Thomas McCabe brushed off Parkinson's staunch opposition to the peg, stating he had personally met with a number of insurance executives and did not believe that they shared Parkinson's views on the subject of supporting government bonds. "Minutes of Meeting of the Federal Advisory Council, September 19-21, 1948," 3, 23; "Policyholders' Money Is Basis of Most of New Investments, Parkinson Maintains," *New York Times*, August 24, 1948, sec. Financial.

argued, as it left the Fed without any other option to control inflation. Reserve requirements, he continued, were "one of the roughest weapons in the tool chest of the Federal Reserve." In addition to reducing bank earnings, they caused an abrupt and disorderly curtailment of credit to business as banks were forced to ration credit. Moderately higher interest rates, in contrast, would be a "gentle deterrent" to business that would rely on price incentives rather than rationing. In making this argument, Leffingwell remained sensitive to commercial banks' apprehension that ending the peg would lead to capital losses. He pointed out that if the Federal Reserve did not start allowing flexibility, the result could only be a more severe bond market break once the peg was eventually removed. He underscored the point, moreover, that allowing some interest rate flexibility would not be the same as removing all support from the Federal Reserve. What Leffingwell wanted was an "unpegged but orderly market," not a free market that would be vulnerable to excessive volatility or illiquidity. Nor did he advocate for an "active dear money policy" which could undercut bond values too drastically.[19]

In subsequent months, the idea that the Federal Reserve might be able to initiate an *orderly* transition to rate flexibility—one that maintained protection against illiquidity and speculative disorder and allowed for only moderate and gradual

[19] I am indebted here to Gerald Epstein and Juliet Schor's excellent article on the Treasury-Fed Accord that highlights Leffingwell's role in the eventual end of the peg. Epstein and Schor miss the mark, however, when they say that Leffingwell's position had "widespread support within the financial community." In fact, as one journalist covering Leffingwell's *Fortune* article noted, "removal of the bond price pegs has been opposed generally by bankers." Leffingwell's argument may have helped to shift opinions, however. Thomas Furlong, "End of U.S. Bond Price Pegs Urged," *Chicago Daily Tribune*, October 1, 1948; Epstein and Schor, "The Federal Reserve-Treasury Accord," 18–19.

increases in interest rates—gained increasing currency among bankers. At a joint session of the American Finance Association and the American Economic Association in December 1948, Chase National Bank chair Winthrop Aldrich reiterated the case. With the prospect of a Dewey presidency in the rearview mirror and Cold War spending escalating, it seemed self-evident to Aldrich that "monetary and credit control should not be left to the vicissitudes of our Federal budget." (Recall, just a few months earlier, when Dewey was still expected to win, bankers were generally *opposed* to a monetary approach to inflation control and preferred a fiscal approach). If bankers didn't want to be subject to the "rationing of capital funds" or "direct control over institutional government security portfolios" (that is, a secondary reserve requirement along the lines that Eccles proposed) they would have to countenance some interest rate increases in order to curb inflation. Like Leffingwell, Aldrich recognized that this medicine was best served with a spoonful of sugar. Bankers needed reassurance that "the abandonment of the present pegs would not mean the end of all intervention in the government securities market." The goal should be simply for monetary authorities to "regain their freedom to determine from time to time what support, if any, is necessary to maintain an orderly market."[20]

A False Start: The 1949 Recession

A mild, deflationary recession in 1949 proved to be an unexpected opportunity for the Federal Reserve to seek to regain this kind of monetary policy

[20] "Aldrich Favors Modifying Pegs On Long-Terms," *New York Herald Tribune*, December 29, 1948.

autonomy. This was a recession caused by the exhaustion of the reconversion process. In the immediate postwar years, substantial output growth was fueled by a combination of accumulated wartime savings and a backlog of deferred consumer purchases. To the extent that demand outstripped the pace of reconversion, this resulted in consumer price inflation as well. By 1947 and 1948, the readjustment period was coming to a close. Wartime savings were gradually depleted and consumer demand growth tapered off. Businesses began to build up excess inventories, leading to a deflationary drag on the economy. This was aggravated by restrictions imposed on consumer credit in early 1948 by the Federal Reserve.[21] By 1949, inflation had turned to deflation and contraction.[22]

In the market for Treasury bonds, the main effect of the recession was that the financial sector shifted from selling to buying. Where banks and insurance companies sought out yield during an upswing, selling Treasuries to the Federal Reserve in order to finance riskier private lending and investment, the downswing left them looking for safety rather than yield. This presented the Federal Reserve with two options. It could continue to stabilize market rates, which would mean selling off Treasury securities from its portfolio and accommodating the institutional demand for safety. But this would withdraw money from circulation during a downturn and potentially

[21] Daniel Hamberg, "The Recession of 1948-49 in the United States," *The Economic Journal* 62, no. 245 (1952): 1–14.
[22] In the course of the recession, overall consumer prices declined 4.2%. Food and agricultural commodities were particularly hard hit with consumer food prices declining by 10.1% and wholesale farm products declining 21.7%. Benjamin Caplan, "A Case Study: The 1948-1949 Recession," in *Policies to Combat Depression*, by National Bureau of Economic Research (Princeton, NJ: Princeton University Press, 1956), 47.

deepen the recession. Providing banks with risk-free assets would also allow them to limit their exposure to the recession rather than encouraging them to lend in such a way that might counter it.[23] Alternatively, the Fed could refuse to meet the demand for Treasuries, allowing interest rates to drop as demand outstripped supply. This would mean a public shift away from the peg. While the Federal Reserve's commitment to the long-term peg was never explicitly formulated as a commitment to stop bond prices from *rising* (the goal was always to maintain investor confidence by providing a guarantee that they would not fall below par, not to maintain a ceiling on rates), bond markets had nonetheless come to expect Fed intervention on both sides.[24]

Federal Reserve leadership waffled, opting for an ineffective middle course. Slow to acknowledge the recession, and even slower to act, the Board eventually took moderate easing action in March 1949, lowering margin requirements on stock trades and loosening consumer lending controls. As the recession deepened, they eventually reduced reserve requirements as well, releasing some $1.2 billion in reserves in early May. This action was immediately counteracted, however, by open-market sales of $1.3 billion.[25] These sales were aimed at preventing what the Federal Reserve characterized as a "disorderly" decline in bond yields, a situation in which the

[23] Today, economics students learn that the Federal Reserve makes net open-market purchases in a recession, thereby expanding the money supply, and makes net sales (shrinking the money supply) to constrain inflationary pressure in an upswing. The financial sector's demand for investment vehicles is not usually treated as a factor in these monetary policy choices.
[24] In its Annual Review, published in February 1949, the Bankers Trust Company wrote that "if the demand for Government securities remains strong, the Federal Reserve banks are no doubt ready to sell Treasury bonds in substantial amounts, if necessary, to prevent an undue rise in prices." "'49 Interest Rates Seen as Stabilized," *New York Times*, 1949, sec. Business Financial. The fact that the Fed never formally committed to putting a ceiling on bond prices is pointed out in Eichengreen and Garber, "Before the Accord," 184.
[25] Meltzer, *A History of the Federal Reserve, Volume 1*, 672–73.

expansion of reserves abruptly enlarged the commercial banking sector's demand for Treasuries without any compensating increase in supply.[26] Taken together, the Fed's actions had no net result on credit conditions. They simply allowed commercial banks to convert their non-earning required reserves into interest-bearing Treasury securities. At a time when calls for decisive action against deflation abounded, the financial press easily recognized that this was "an interesting gesture [toward easing] but little more."[27]

Commentators elsewhere raised doubts about the Fed's policy of pumping up reserves with one hand and draining them with the other. This policy prevented bond yields from declining and helped financial sector earnings but did little else for the economy. Instead of stabilizing bond yields, some argued that the recession offered the perfect opportunity to abandon rate stabilization altogether. An anonymous source, reportedly close to the Federal Reserve, told the *Philadelphia Inquirer* shortly after the reserve requirement increase that it was the ideal time to leave the peg. The recession meant that interest rate flexibility could be introduced without putting banks in any danger of capital loss, since high demand for Treasuries would keep prices above par for the foreseeable future. And even if rates jumped up, the Fed could soften the blow by cutting reserve requirements further, which would force money

[26] Board of Governors of the Federal Reserve System, "Thirty-Sixth Annual Report of the Federal Reserve Board Covering Operations for the Year 1949," 1950, 7.
[27] Sherwin Badger, "Bank Reserve Cut Unlikely to Start Business Upswing," *Boston Globe*, May 1, 1949. This was echoed in the *New York Times*, where financial editor John Forrest noted that the reserve requirement cut would "undoubtedly enter the Government bond market but do nothing toward stimulating the expansion of credit." John G. Forrest, "The Financial Week," *New York Times*, May 1, 1949, sec. Business Financial.

back into the Treasury market. It had to act quickly, however. If the Fed didn't make a decisive push toward flexibility, the window of political feasibility might close. It might then "have to support the Government bond market for all time to come."[28]

Toward the end of June, the Fed took up this advice, though half-heartedly. After its June 28 meeting, the FOMC issued a public statement indicating a move away from rate stabilization. For the period that the peg was in effect, FOMC statements had routinely described the goal of open market operations as the maintenance of "stable and orderly conditions in the Government security market." The June statement omitted the word "stable" for the first time. It stipulated only that the FOMC would maintain "orderly conditions," and that open market operations would otherwise be conducted "for the purpose of relating the supply of funds in the market to the needs of commerce and business."[29]

The goal of this statement was to suggest, without definitively stating, that the FOMC was moving toward freer money markets. Such a message was especially significant in light of the fact that on June 30th, the Board of Governors' emergency authorization to impose higher-than-usual reserve requirements was set to expire.[30] After expiration, reserve requirements would return to their former statutory maximum, releasing an another $800 million in reserves. In this context, deleting

[28] "FRB Is Reported Ready to Drop U.S. Bond Pegs," *The Philadelphia Inquirer*, May 9, 1949.
[29] Board of Governors of the Federal Reserve System, "Thirty-Sixth Annual Report of the Federal Reserve Board Covering Operations for the Year 1949," 113–14.
[30] After Truman's reelection, he collaborated with the Board of Governors to push for an extension of the increased reserve requirement authority beyond June 30, in addition to granting the Federal Reserve authority to set reserve requirements at nonmember banks. Unsurprisingly, none of these measures passed through a Republican Congress. Meltzer, *A History of the Federal Reserve, Volume 1*, 669.

"stable" from the statement indicated that the Fed would not attempt to reabsorb the $800 million with open-market sales. It would let yields decline instead.

Still, the FOMC did not want to make too strong a statement. Allan Sproul, who pushed for the deletion, noted in the June 28 meeting that, while he wanted the market to "move as freely as possible," he "did not wish to abandon permanently any idea that it might have to come to the support of the Government securities market subsequently." Sproul wanted language that suggested "the confidence of investors would be maintained but which left some doubt as to just what would be done with respect to the long-term peg."[31] Sproul's ambivalence in the meeting was a symptom of the contradictory pressures within the banking sector. Like most bankers, he thought that it was important, in the abstract, that the Federal Reserve regain some degree of monetary policy autonomy and interest-rate flexibility in order to control future inflation. He also knew that the high demand for Treasuries made this a politically opportune moment to convince the Treasury to cooperate in allowing rate fluctuation. Treasury Secretary John Snyder may have still been convinced that it would be "catastrophic" to let long-term bonds drop below par, but it was clear that nothing of the sort would happen in the near future. Snyder was thus receptive to an approach that would allow for a decline in rates, even if a rate increase remained out of bounds.[32] Still, if the time seemed ripe to move away from the peg, Sproul knew that bankers were unhappy with the idea that the Federal Reserve would refuse to sell

[31] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, June 28, 1949," 1949, 7–9.
[32] Federal Open Market Committee, 4, 11.

off its bond portfolio when Treasuries were in high demand. Consequently, he wanted to make sure any move toward flexibility would not alienate bankers and undermine "investor confidence."

On June 29, bond quotations soared in anticipation of the expiration of emergency reserve requirements the following day. In a market that had become accustomed to infinitesimal adjustments of a few basis points, long-term Treasury bond prices rose by 0.75%. Dealers, expecting the Federal Reserve to step in and stabilize rates, initially sold large blocks, but soon realized that the support policy had changed. As rates climbed higher with no response from the Fed's open market account, selling slowed to a trickle and prices stabilized well above par.[33] Yields on long-term Treasury bonds would remain low throughout 1949 as the Federal Reserve, which had sold of $3 billion worth of bonds in the first half of the year, virtually withdrew from the long-term market.[34]

At the end of the summer, Fed Chair Thomas McCabe asked the bankers on the Federal Advisory Council what they thought of the new policy stance. Noting that the Federal Reserve was experimenting with leaving the peg and had decided to "let the long-term market operate freely," he asked the bankers whether they thought the market was "too free." But the bankers disagreed with the premise of the question. While the FAC was appreciative of the reductions in reserve requirements (there had been a third cut in August), they felt that the Federal Reserve was unnecessarily

[33] George Wanders, "Reserve Board Deflation Move Is Questioned," *New York Herald Tribune*, June 30, 1949, sec. Financial.
[34] Board of Governors of the Federal Reserve System, "Thirty-Sixth Annual Report of the Federal Reserve Board Covering Operations for the Year 1949," 10–11, 29.

suppressing long-term yields by withholding bonds from the market. Since the Federal Reserve was such a central player in the Treasury market, they argued that outright withdrawal did not make the market "free." On the contrary, withdrawal amounted to market manipulation and created disorderly conditions.

Implicitly invoking the original, agricultural, doctrine of orderly marketing, FAC President Edward E. Brown compared the Federal Reserve to a grain speculator "who bought 100 million bushels of wheat and then announced that he believed in free enterprise but would not sell any of his wheat." Just as the speculative withholding of inventories in agricultural markets could contribute to disorderly inflation in wheat prices, the Fed was inflating bond prices to unreasonable levels by withholding its supply. W. Randolph Burgess added that he did not by any means think that the market was "too free." In fact, he thought recent market trends were propelled entirely by the Fed's statement: "the market was hit with a sledgehammer in the June statement. The market is seldom told that bonds are a buy. A very heavy weight of influence was put on one side of the market." In other words, Burgess thought that the Federal Reserve was such a pivotal actor in the government securities market that its very statement of non-intervention was itself a weighty intervention. Suggesting that it would allow markets to move freely while the reserve requirement expiration flooded banks with excess reserves simply inflated bond prices and depressed yields. While the bankers voiced lukewarm approval of the move toward rate flexibility, they argued that the market was "clumsily handled" and "did not feel it was necessary to drive interest rates so low." Flexibility in the abstract was well and

good, but the Federal Reserve still should have "pumped out bonds into the market" to supply investors (mostly banks and financial corporations) with the securities they demanded, at remunerative rates.[35]

This opinion was widely held in the financial sector. The Investment Bankers Association of America released a statement later in 1949 making essentially the same argument: "We welcome this evidence of increasing flexibility of [interest-rate] policy, but … we have begun to wonder whether the Federal Reserve Board has not gone to the opposite extreme of starving the market to unwarrantedly higher price levels by withholding its potential supply so completely."[36] Other bankers criticized the Fed's bid to lower long-term rates during a recession as ineffective. Pumping more liquidity into money markets in a period of already easy money would not promote real recovery. Loans were down because there was no demand, not because there was an inadequate supply of loanable funds. All that further easing would do is help lower the Treasury's debt-service cost at the expense of banks and financial institutions that had nowhere else to put their funds but in Treasury securities.[37]

It is worth dwelling for a moment on the substance of the bankers' criticisms here. Banks were proclaiming their own powerlessness to alter the course of the real economy. Bank credit could not spur a recovery. All that banks could do was to wait things out until prospects for profitable investment improved. In the meantime, they

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[35] "Minutes of Meeting of the Federal Advisory Council, September 18-20, 1949," 1949, 3–5, 12, https://fraser.stlouisfed.org/files/docs/historical/nara/fac_minutes/fac_19490918.pdf.
[36] "Bankers Urge Interest Hike On U.S. Debt," *The Washington Post*, December 9, 1949.
[37] See the statements by Guaranty Trust Co. quoted in Harold Walsh, "March of Finance," *Los Angeles Times*, August 24, 1949; see also "Bankers Say Move Will Not Lift Lending Demand," *New York Times*, June 30, 1949, sec. Business Financial.

demanded that the federal government grant them a healthy profit for *not* investing in economic growth. Banks wanted the Federal Reserve to keep interest rates from declining too steeply. They wanted to ensure the availability of risk-free assets with a reasonably high return—a passive stream of income that would allow them to weather the recession without contributing to a recovery.

Claims that the Federal Reserve was "starving the market" of Treasuries were, in any event, exaggerations. In fact, the FOMC was quite sensitive to the financial sector's complaints. Although it stopped selling long-term, higher-yielding bonds after the June statement, it almost immediately started selling certificates and bills in order to prevent short-term yields from slipping. In effect, this continued the earlier program of sterilizing the expansionary effects of reserve requirement cuts. When yields on Treasury bills dropped from 1.16% to 1% after the June 28 announcement, the Fed moved quickly to "restore more orderly conditions in the market" by selling off bills from its portfolio. And when further reserve requirement reductions were introduced in August, it made sure that the net reserve effects were completely offset by sales of bills and certificates. As the Board put it in its 1949 *Annual Report*, "liquid short-term investments were … provided for any excess reserve funds that banks were unable to utilize elsewhere."[38]

Discussions in the August FOMC meeting made it clear that there was no plausible monetary policy rationale for canceling out reserve requirement cuts with

[38] Board of Governors of the Federal Reserve System, "Thirty-Sixth Annual Report of the Federal Reserve Board Covering Operations for the Year 1949," 8–10.

continued open-market sales of short-term bills and certificates. When FOMC members questioned the purpose of the action in an August 5 meeting, it was openly acknowledged that it was not meant to fight the recession. Rather, the goal was to "offset the decline in banks' earnings that would result from lower interest rates."[39]

The Douglas Committee Hearings

If banking opinion was starting to turn against the peg in 1948, the 1949 recession showed that support for interest rate flexibility in the banking industry was fragile and conditional. Interest rate changes could not be too fast or too drastic that they would undermine banks' capacity to shift in and out of Treasuries on demand, at prices that they deemed to be reasonably remunerative. During the postwar inflation, exiting the peg seemed impossible because of the threat of a bond market panic imposing capital losses on bankers' portfolios. But when a reprieve from inflation finally arrived in 1949, and the risk of a bond market panic dissipated, many bankers were unprepared to accept the low yields and dearth of Treasuries that accompanied the Fed's modest attempt to move toward flexibility.

Ultimately, what the bankers wanted was not free markets. Free markets presented the possibility of market discipline coming to bear on their own balance sheets. What they wanted was orderly markets—markets in which price flexibility was tempered by liquidity support from the Federal Reserve. As long as the Fed guaranteed that reasonable bids and offers would be available in the Treasury market,

[39] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, August 5, 1949," 1949, 7.

price movements would be cushioned, volatility would be constrained, and banks would always have recourse on demand to a safe, liquid, and remunerative asset. In essence, they would have guaranteed access to a put option that would limit their exposure to the "real economy."

In late 1949, a subcommittee of the Joint Committee on the Economic Report, chaired by senator Paul Douglas, provided a public forum for bankers and their allies in the Federal Reserve to expound on this vision of flexible but orderly markets in government securities. The subcommittee was convened to investigate the causes and consequences of the tensions between debt management and monetary policy that had arisen in the postwar period. Its principal focus was the peg. Did the obligation to support Treasury bonds at par conflict with the need to control inflation? And if the Federal Reserve were to withdraw its support for the yield curve that the Treasury dictated, how should the responsibilities between the two agencies be divided, given that both operated in the market for Treasury securities?

Two positions on the peg dominated the Douglas committee hearings. On one side, proponents argued that interest rate adjustments were ineffective in fighting inflation unless they were so drastic that they would generate panic in the bond markets. Flexibility was either ineffective or disorderly. The best course of action, then, was to guarantee par value of government debt and to use other means (such as Eccles' secondary reserve plan) to control inflation.

On the other side, opponents of the peg made the case that moderate adjustments in interest rates could be carried out without creating bond market

disorder. The Federal Reserve could provide enough liquidity support to ensure that rate adjustments would not lead to spirals of disorderly speculation. It would not simply wash its hands of responsibility for the outstanding government debt and leave things to "the market." At the same time, opponents of the peg defended monetary policy (conducted through open market operations) as the means of macroeconomic stabilization that was most consistent with a market economy. Unlike reserve requirements, which were like a selective tax levied only on member banks in the Federal Reserve system, or "direct" and "selective" controls, monetary policy was oriented toward the entire economy. It did not involve government agencies in substantive economic decisions. Government fixing price ceilings or placing direct limits on bank credit, it was argued, were bricks in the road to serfdom. The Federal Reserve guaranteeing liquidity in bond markets and flexibly adjusting interest rates was, on the other hand, eminently compatible with a liberal, market order.

The most vocal advocate for the peg in the hearings was John D. Clark of Truman's Council of Economic Advisers.[40] Clark's contention, typical for those in the pro-peg camp, was that the public must have "absolute confidence that Government bonds are going to be supported [at par]." Par was easily understood by the public. Any other basis of support would create a crisis of confidence. If the

[40] Other supporters of the peg in the hearings included FDIC chair Maple Harl, and AFL president William Green. Treasury Secretary Snyder supported the peg in private. But in his public testimony, he was more interested in minimizing the appearance of public controversy than in propounding the virtues of interest rate stability. This was likely out of fear of upsetting the bond market. In the hearings, Snyder denied that the Treasury was inflexible about rate support and denied that there was any dispute between the Treasury and the Federal Reserve. This testimony was contradicted by several others in the hearing. Monetary, Credit, and Fiscal Policies, 408–10; Meltzer, *A History of the Federal Reserve, Volume 1*, 686.

Federal Reserve suddenly lowered its support level from par to 98, for example, many people would take that to mean that "it would be 93 tomorrow." If the goal was to maintain the government's credit position with $250 billion of debt outstanding, allowing for this kind of speculative erosion of bond values was not an option. Asked about the June 28, 1949 statement issued by the Federal Reserve (which announced that the Fed would maintain "orderly" but not "stable" markets), Clark responded that he could not support the Federal Reserve's ideas about "the freedom of the market for long-term bonds." Treasury might have allowed some upward flexibility on bond prices during the recession, but this did not mean that it should allow downward flexibility if inflation returned. Furthermore, Clark argued that interest rate increases were an ineffectual method of inflation control. "The Federal Reserve people … greatly overestimate the significance of tiny fluctuations in short-term rates," he said. Firms "do not make managerial decisions … upon a shift of one-half of 1 percent." A much better, more direct option, for controlling inflation and constraining credit creation was Eccles' secondary reserve plan, which the Council of Economic Advisers "heartily supported."[41]

There was no shortage of challengers to Clark's line of thinking in the hearings. Bankers, Federal Reserve officials and powerful corporate lobby groups like the U.S. Chamber of Commerce and the National Association of Manufacturers all

[41] Eccles, for his part, equivocated on the Eccles Plan in the Douglas hearings. He noted that the plan was first floated during an inflationary episode; talking about it now after inflation had subsided was merely an "academic discussion." Still, he again offered it up to Congress as one policy option, a middle way that would allow the Federal Reserve to impose monetary restraint without undermining Treasury's prerogative to set interest rates. Monetary, Credit, and Fiscal Policies, 534–38, 550–52, 239.

lined up to testify on the drawbacks of rigid price support in the government securities market. A leitmotif in this testimony was the conviction that "direct" controls—such as rationing and price control—were coercive and totalitarian, while "indirect" or "general" measures—such as flexible open market operations—were consistent with a liberal, free society. Reserve requirement increases, though technically classified as a "general" credit control, were also painted as coercive and totalitarian because they limited the freedom of banks to dispose of assets as they saw fit.

The testimony of bank executive J. Cameron Thomson typified this position. For Thomson, monetary policy and other "general" macroeconomic stabilization measures were preferable because they

> allow the Government to influence the over-all forces … that determine the stability of the economy without necessarily involving the Government in … control of the particulars of the economy. These over-all measures will, of course, affect different individuals and businesses differently. But the differences are determined by the market process, not by Government decisions.

Direct controls, on the other hand, "necessarily involve widespread power of government to affect the economic fortunes of particular individuals, businesses, industries, and regions selectively; that is, discriminatingly." They were inherently coercive, involving the "power to reward or punish … by administrative action." Such power, Thomson believed, "would ominously threaten the survival of our free society."[42]

[42] Monetary, Credit, and Fiscal Policies, 268–69.

The idea that monetary policy effected through open market operations did not involve government in economic "particulars" is hard to square with the fact that decisions on interest rate policy directly and specifically impacted the earnings and liquidity of the commercial banking sector. And as we have seen, direct bank lobbying and personal connections between the Federal Reserve and the financial sector have just as much influence on Federal Reserve policymaking as abstract, impersonal judgments about the macroeconomy.

Nevertheless, the ideological framing of monetary policy as something that impacts the general framework of the economy without involving government in the particulars—we might say the form of the economy, but not the substance—was pervasive in the hearings. Thomas McCabe, for instance, analogized the Federal Reserve to the courts. Just as courts guarded the formal framework of property rights that allowed a free enterprise system to flourish, the Federal Reserve guarded the formal monetary framework. Regulating the cost and availability of credit was not, therefore, characteristic of a "managed" or "administered" economy, but "part and parcel of a free-enterprise economy."[43]

By "free-enterprise economy," McCabe did not mean laissez-faire in the bond markets. With $250,000,000 in outstanding debt, Fed officials and private bankers were unanimous that interest rate flexibility should not be equated with nonintervention on the part of the Fed. When Senator Douglas questioned Edward E.

[43] The quoted language is from Fed chair Thomas McCabe's testimony. Monetary, Credit, and Fiscal Policies, 462.

Brown, president of the Federal Advisory Council, about whether the price of bonds should be determined by "market forces," Brown answered unequivocally that it "cannot be worked that way." The Federal Reserve was simply too large a holder of U.S. Treasuries for it to bow out of the market. In Douglas's gloss of Brown's testimony, the Fed was "part of the market, and if you take it out it will alter the market."[44]

Alfred H. Williams, president of the Philadelphia Fed, elaborated on this point. Leaving the peg would mean an end to "inflexible support," but it would not mean that "the Government securities market would be abandoned to its own fate." Indeed, it was not clear what a "free market" in government securities would even mean. Did it mean that the Fed should decline to roll over the debt already in its portfolio, thereby leading to monetary contraction by default as its holdings reached maturity? Was it somehow more "natural" to allow the maturity structure of the debt to determine monetary and credit conditions in this way? Williams thought not. Instead, his goal—and likewise the goal of the Federal Reserve System—was "an orderly and flexible but neither a rigid nor a completely free market for Government securities."[45]

An integral component of the case for orderly, flexible interest rates was the idea that postwar money markets would be more sensitive to slight changes in the rate structure than they had once been. Supporters of the peg regularly pointed to the

[44] Monetary, Credit, and Fiscal Policies, 258.
[45] Monetary, Credit, and Fiscal Policies, 52.

collapse in the values of Liberty Bonds following World War I as evidence of the necessity of stabilized rates.[46] Allan Sproul responded to this line of thinking by arguing that the depth of the Treasury market, combined with liquidity support from the Fed, would ensure that a repeat of such a collapse would be neither possible nor necessary. The deep, liquid Treasury market that the Second World War had helped to create was qualitatively different to the limited market that existed after World War I:

> With a Government debt of the size of our Government debt and forming so large a part of the whole debt structure of the country, the System has a homogeneous market wherein which it can operate at all levels of rates such as it has never had before. So that we can step into the market and have our effect felt almost immediately, and I think have the reverberations spread out through the whole corporate security market and out through the whole banking and business community in a way not possible before the Government debt became such a large part of the whole debt structure.

Now, Sproul continued, the money market was "sensitive to relatively small changes in the interest rate structure, and to any uncertainty concerning the future direction of rates created by such changes." What this new sensitivity meant in practice was that monetary policy goals could be accomplished "without violent fluctuations in interest rates or in prices of Government securities."[47]

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[46] After the first world war, interest rate hikes enacted by the Fed had imposed significant losses on bondholders. This erosion in bond values not only had an economic effect on bondholders; it also eroded the legitimacy of the government. Recent research suggests the losses imposed on Liberty bond holders was a major factor in contributing to Republican victories in the presidential elections of 1920 and 1924. Eric Hilt and Wendy Rahn, "Financial Asset Ownership and Political Partisanship: Liberty Bonds and Republican Electoral Success in the 1920s," *The Journal of Economic History* 80, no. 3 (September 2020): 746–81.

[47] Monetary, Credit, and Fiscal Policies, 432–57.

W. Randolph Burgess, a banking executive and member of the FAC, concurred with Sproul. The present time was one in which a small adjustment in interest rates could make a big difference. For this reason, it was crucial that the Federal Reserve's capacity to steer credit conditions by adjusting interest rates was restored.[48] At the same time, Burgess pointed out that the very scale of trading in Government debt meant that the Federal Reserve System had to take responsibility for preventing any interruptions in that trading. The Fed had to make sure, in other words, that bids and offers on government debt were continuously available—that Treasury securities could be always bought and sold on demand without excessive loss. If Fed officials elsewhere in the hearings suggested that interest-rate flexibility would bring the "price mechanism" back to the bond market, Burgess made the subtle, but crucial point that there could be no price mechanism if speculative disorder made bids or offers evaporate, thereby making it impossible to sell or buy at any price.[49] "In the price economy," he affirmed, "there needs to be a buyer at a price." The Fed's guarantee of orderly markets would make this principal operational. To ensure that Treasuries remained liquid—that is, to ensure that there would always be "a buyer at a price"— the Fed would have to "cushion any serious decline and … cut off distress selling." It would also require that the Fed didn't allow the market to become too "restricted" by refusing to supply Treasury securities when investors demanded them—as it had in 1949.[50]

[48] Monetary, Credit, and Fiscal Policies, 185–90.
[49] For example, Alfred H. Williams said in his testimony, "We have a price mechanism here … [we] ought to get it out and use it." Monetary, Credit, and Fiscal Policies, 55.
[50] Monetary, Credit, and Fiscal Policies, 185–90.

Burgess's vision of orderly, rather than free, markets was a not a controversial position in the hearings. As Senator Douglas put it, "I do not suppose anyone except, shall we say, financial die-hards, want to have a completely unsupported bond market."[51] Still, the idea that a flexible interest-rate regime would constitute a "free market" in which prices were set, not by the government, but by uncoordinated investment decisions of countless private individuals, repeatedly cropped up in the hearings. The conservative National Association of Manufacturers (NAM), for example, urged the Treasury to allow a "free money market" to "resolve the terms of its security offerings." The NAM also suggested avoiding the issuance of non-marketable or bank-restricted securities. Only if the Treasury subjected its new issues to the discipline of the market price mechanism would "the direct cost of deficit financing … be promptly exposed for all to see in the budgeted charges for interest."[52] In other words, the NAM argued that a move away from the peg would allow "the market" to generate a price which revealed investors' collective judgments about the fiscal policy of the Federal Government.

The persistent appeal to "free markets" was not just a rhetorical flourish. Rather, it reveals an important tension that ran through the entire effort to end the peg. The reason that the "free market" could not be pushed out of the discussions (despite the fact that, when it came to the bond market, no one claimed to believe in it) was that it formed the normative keystone of the argument to end the peg. The

[51] Monetary, Credit, and Fiscal Policies, 409.
[52] Monetary, Credit, and Fiscal Policies, 362–65.

conflict between the Treasury and the Federal Reserve was branded, not as a conflict between state agencies, but as a boundary struggle between state and market. When the Treasury fixed interest rates, it did so "artificially," without regard to market discipline. The pegged rates lead to fundamental imbalances and disequilibria, which then, in turn, needed to be remedied through further antimarket measures such as price controls and secondary reserve requirements. This was the road to serfdom. When the Federal Reserve set rates or intervened to correct disorderly market conditions, however, it was understood to do so in a way that reinforced, rather than undermined, "market" values.

But under a flexible interest rate regime, the market price of Treasury securities would still be mediated by the judgment of the Fed. The Fed would determine whether market conditions were "orderly"—whether or not market prices reflected underlying fundamentals or were a symptom of disorderly speculation. The Fed would also make longer-term judgments about whether or not interest rates were appropriate to the state of the economy. It would "read" the economy to produce a judgment about the "correct" market prices. In this sense, the Federal Reserve could indeed be understood as a court, as chair McCabe suggested. Rather than interpreting and enforcing codified law, however, it would ensure that price movements remain in line with its interpretation of *economic* law. The Fed's job would be to interpret

whether money market conditions appropriately corresponded to real economic forces.[53]

Escalating Tensions Between the Federal Reserve and the Treasury, 1950-51

Hearings before the Douglas subcommittee concluded in December 1949. In January 1950, the bipartisan panel released its final report, which made front-page news around the country.[54] The panel was unanimous in its support of interest rate flexibility and recommended that

> primary power and responsibility for regulating the supply, availability, and cost of credit in general shall be vested in the duly constituted authorities of the Federal Reserve System, and that Treasury action relative to money, credit, and transactions in the Federal debt shall be made consistent with the policies of the Federal Reserve.[55]

In short, the committee recommended that Treasury debt management policy be made subservient to the Federal Reserve's monetary policy when it came to setting interest rates.

The Douglas committee reinforced this recommendation by adopting major talking points from the bankers who testified in the hearings. Like the bankers, the report argued that independent monetary policy was "more compatible with the maintenance of democracy and free competitive enterprise than would be the only

[53] Naturally, the incongruity in this line of thinking is that it tends to undermine the very principal that legitimates market pricing—namely, the idea that markets provide a mechanism for price *discovery*. If economic law requires technocratic expertise to ensure its implementation, suggestions that the market economy is an autonomous self-ordering sphere sound rather hollow.
[54] Binder and Spindel, *The Myth of Independence*, 157.
[55] Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the Economic Report, "Monetary, Credit, and Fiscal Policies" (Washington DC, 1950), 18.

alternative—a complex harness of direct controls." The report also stated that it was "untenable" to argue that the Federal Reserve should withdraw from the bond market. While the Fed ought to avoid "the maintenance of such inflexibly low yields as to reduce seriously the effectiveness of monetary policy for anti-inflation purposes," it was imperative that it intervene in the market to prevent "not only panicky declines in the prices of … [government] securities but also other disorderly, erratic, and overly rapid changes."[56]

The Douglas panel's initial report was not enough to convince the Treasury to make the leap from "stable" to merely "orderly" markets, however. The full Joint Committee on the Economic Report did not endorse the Douglas Subcommittee's findings. Even if it had, the full committee was only an advisory body to begin with. It had no power to legislate. Still, as Sarah Binder and Mark Spindel convincingly argue, Douglas's support of the Federal Reserve position bolstered the Fed's bargaining position with the Treasury. The fact that Douglas, a Democratic senator, was publicly challenging the Truman administration on debt management showed that the Federal Reserve would likely be able to muster more support than Truman's Treasury if the conflict was decided in Congress.[57]

In the meantime, a geopolitical storm was brewing. As the domestic recession of 1949 wound down, communist advances in the international sphere made a third world war seem like an imminent possibility. Military conflict with the Soviet Union

[56] Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the Economic Report, 5, 28.
[57] Binder and Spindel, *The Myth of Independence*, 158–60.

had been narrowly avoided in Germany (the Berlin blockade had ended in May 1949), but tensions were rising in the East. The USSR tested its first nuclear weapon in August 1949;[58] Mao declared the establishment of the People's Republic of China in October; and by late June 1950, a communist insurgency in South Korea had embroiled the United States in the first open military conflict of the Cold War era.

Tensions were rising between the Truman Administration and the Federal Reserve as well. Before the Korean War, Truman's fiscal conservatism helped bolster his credibility within the Federal Reserve, even if he was regarded with suspicion by the banking community. In 1947 and 1948, his government had run substantial budget surpluses. Indeed, these surpluses were the only significant force toward monetary restraint in those years, since the peg left open market operations hamstrung.[59] But in the run-up to Korea, Truman became increasingly receptive to the Keynesian ideas of Leon Keyserling and John D. Clark on his Council of Economic Advisers. Clark and Keyserling argued that defense spending must take first priority. Budgetary considerations would be secondary.[60] Fiscal deficits returned as the United States entered the war.

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[58] Robert Norris, "Soviet Nuclear Testing, August 29, 1949 - October 24, 1990," *Bulletin of the Atomic Scientists* 54, no. 3 (1998): 69.

[59] Budget surpluses removed money from circulation. Net tax payments would increase deposit balances held in the Treasury's commercial bank accounts (called Treasury Tax and Loan accounts). Whenever the Treasury transferred balances from its accounts at commercial banks to its account at the Federal Reserve, this would decrease the reserve position of the banks by the amount of the transfer. This would contract the supply of reserves—high-powered money. All things equal, this would contract the money supply. However, with the peg in place, commercial banks could replenish their reserves as needed by selling off their Treasury holdings to the Fed. So the effect was limited.

[60] Kirshner, *Appeasing Bankers*, 127–32.

Anticipating another long period of war finance, Truman's Treasury Secretary John Snyder became increasingly insistent that interest rates remain frozen. Snyder had been at least somewhat willing to negotiate on rate increases suggested by the Fed in early 1950. But as soon as it became clear that the U.S. would be involved in a protracted war, stability became the paramount goal.[61] War brought inflation as well. And with interest rate hikes ruled out, the Truman administration once again expected to rely on direct controls.[62]

[61] As the 1949 recession came to an end, the Federal Reserve regularly petitioned Treasury to increase its offering rates. As Allan Meltzer puts it, "Occasionally the advice was accepted; most often it was not." With war looming, Snyder followed his predecessor Morgenthau in the belief that investors would postpone purchases if they expected future interest-rate hikes as war spending escalated. Quashing any such expectations was essential. Keeping debt service low remained a concern as well. Kirshner, 133–38; Meltzer, *A History of the Federal Reserve, Volume 1*, 678.

[62] In a memo written shortly before the U.S. entered the war, Truman's CEA argued that if inflationary dangers returned, "there are safer ways to counteract these dangers than through higher interest rates … Every policy of the Treasury, the Federal Reserve Board, and other Governmental agencies should be watched carefully and continuously with the objective of maintaining the salutary effects of a cheap money policy and low interest rates." Council of Economic Advisers, "Quarterly Report on the Economic Situation," April 17, 1950, 13, https://fraser.stlouisfed.org/archival-collection/student-research-file-1348/council-economic-advisors-first-quarter-review-president-1950-72993; quoted in Epstein and Schor, "The Federal Reserve-Treasury Accord," 22.

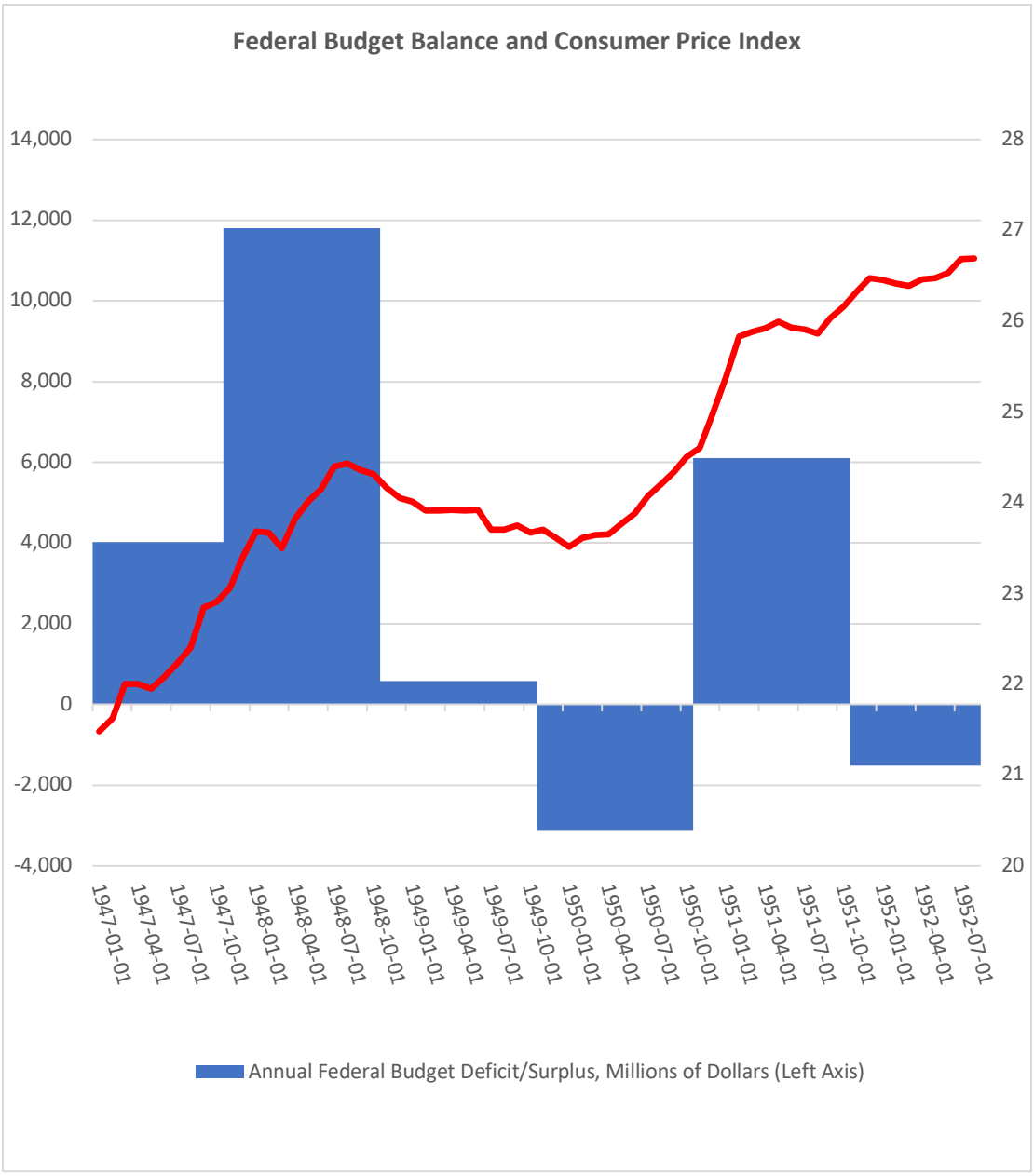

Figure 3: Federal Budget Balance and Consumer Price Index, 1947-1952

Source: Budget Balance from U.S. Treasury; CPI data from Bureau of Labor Statistics

Taken together, this all amounted to a frontal attack on the banking industry—the kind Russell Leffingwell and others had warned of years earlier. Bankers began to sound the alarms. Remembering the experience of World War II, Joseph Stagg Lawrence of the Empire Trust Company warned that the coming inflation meant that bankers were "marked for immediate slaughter." If they didn't act now, they would be crushed under the boot of the government planner, who once again was scheming to expropriate the liquidity of bankers' Treasury holdings: "Most important of all to the planner who is using money and credit to perpetuate and increase his power, the banker must become the great absorber of government bonds which can no longer be sold on the open market."[63]

This polarized environment provided the Federal Reserve with an opening to push more aggressively for higher rates. In the summer of 1950, the FOMC repeatedly moved to increase short-term rates unilaterally, without prior approval from Treasury. In each case, Treasury would respond by announcing new issues at the original, lower, rates. This called the Fed's bluff: either the FOMC would have to buy up the issue (which carried a lower yield than the rate announced by the Fed) or it would have to allow the issue to fail, thereby undermining the perceived creditworthiness of the U.S. government in a time of war.[64]

In the event, the FOMC did not allow the Treasury's issues to fail. But the cat was now out of the bag. Internecine squabbles over interest rates had erupted into a

[63] "Banker Rated First Victim of Inflation," *Chicago Daily Tribune*, June 8, 1950.
[64] Meltzer, *A History of the Federal Reserve, Volume 1*, 691–98.

highly publicized conflict. It was a conflict, moreover, that proved extremely disruptive to U.S. Treasury markets. In August, the clash between the two agencies led market participants to place huge volumes of speculative bets on whose rate would prevail in money markets, driving the turnover of Treasury securities to record highs. Gyrations in the money supply ensued as bankers and dealers rapidly shifted funds in anticipation of the uncertain outcome.[65]

The unsettled condition of the government securities market gave many in the banking sector and financial press pause about supporting the Fed's bid for flexible rates and greater policy autonomy. Testifying before the Douglas committee about the need for flexible, orderly markets was one thing; witnessing the Fed introduce volatility and disorder into the bond market by openly defying the Treasury was quite another.

In the September convention of the American Bankers Association, bankers had noticeably cooled to the Federal Reserve's position. Outgoing ABA president F. Raymond Peterson refused to support the Fed's strategy for pressuring the Treasury, saying only that he didn't think it was necessary for the ABA to get involved in the conflict.[66] Another former ABA president, A.L.M. Wiggins, declared it unlikely "that in the foreseeable future there will be or can be a return to a so-called free money market." As long banks held 41% of their assets in the form of Treasury securities,

[65] "The Money Market: Firm Money Apparently Wins First Round in Clash of Fiscal Policies," *Wall Street Journal*, August 28, 1950.
[66] J. A. Livingston, "Threat of Credit Curbs Leads Bankers to Serious Thinking," *The Washington Post*, September 28, 1950.

and as long as the Federal Reserve had to maintain an orderly market in those securities, little could be done to raise interest rates, Wiggins said.[67]

The financial press was less diplomatic than the bankers. George Wanders, a *Washington Post* financial columnist who wrote approvingly of the Douglas Committee's pro-Federal Reserve stance just nine months earlier, now issued a stern rebuke:

> The chaotic turnover of Treasury issues in the recent refinancing makes a mockery of Federal Reserve assertions about orderly conditions in the market for government securities. The dispute is spreading a public uneasiness about both the market and purchasing power values of investments in Treasury obligations. … it gives increasingly ugly connotations to the fact that one of the greatest markets of our reputedly free economy — the money market — is actually cribbed, cabined, confided, adjusted and manipulated at will.[68]

Such statements exemplify the dominant feeling in the financial sector at the time. In the wake of the first major public break between the Treasury and the Fed, concern for the stability of the government securities trumped any interest in interest-rate flexibility and inflation control.

This is not to say that bankers were unconcerned about inflation, however. Quite the opposite. According to one journalist covering the September ABA convention, "Stop inflation!" was a rallying cry.[69] Still, if bankers were unanimous that domestic inflation posed at least as much of a threat to the United States as the

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[67] "Savings Held Key to Curb Inflation," *New York Times*, September 27, 1950, sec. Business.
[68] George Wanders, "The Week in Finance: Treasury-Federal Reserve Agreement Urged," *New York Herald Tribune*, October 2, 1950, sec. Financial; cf. George Wanders, "This Week in Finance: Economic and Politics of the Douglas Report," *New York Herald Tribune*, January 16, 1950, sec. Financial.
[69] J. A. Livingston, "Two Foes Again Confront U.S.; Russia First, Inflation Second," *The Washington Post*, September 30, 1950.

Soviet Union did, they were divided on the question of whether higher interest rates would actually solve the problem—especially if achieving higher rates required fomenting an intergovernmental conflict that would destabilize the bond market. Bankers were more interested in petitioning the Truman Administration to cut social spending and finance the war on a pay-as-you-go basis than they were in getting involved in a disruptive feud between the Treasury and the Fed.[70] As far as they were concerned, the immediate task was smoothing things over between the agencies and restoring financial stability.

Toward this end, bankers from the Federal Advisory Council met with Treasury officials in late November. Anxious to show goodwill from their industry, they sought to ease tensions and prevent another conflict from rocking the market. One FAC member compared the August conflict between the agencies to a ship where the captain was yelling, "full steam ahead!" while the mate dropped anchor. The bankers hoped that they could mediate between the two and bring the ship back onto an even keel. They did not, however, take a stance on which agency should be the captain and which should be the mate.[71]

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[70] James E. Shelton, the incoming president of the ABA, was particularly vitriolic about the budget. According to Shelton, Truman had fed the fires of inflation after World War II by holding prices down while he let wages soar. Now was the time for the government to act aggressively to contain inflation by cutting social spending "to the bone." Shelton agitated for cuts to nearly everything, from "socialized medicine" to veteran benefits. To do otherwise was to lead the American people down the road to "economic and political enslavement," and to drown America's youth in a "whirlpool of socialism." "McCabe Declares U.S. Must Take Further Steps to Restrict Credit," *New York Times*, December 15, 1950, sec. Business & Finance; Associated Press, "Charges U.S. Is Led Toward Enslavement," *Chicago Daily Tribune*, December 9, 1950.

[71] J. A. Livingston, "Bankers Serve as Good Bridge Between Snyder and McCabe," *The Washington Post*, November 24, 1950.

In any event, the bankers' goodwill mission to the Treasury was overshadowed by a major escalation in the Korean War. On September 26, 1950, United Nations forces captured Seoul. Three days later, an optimistic Truman authorized General Douglas MacArthur to cross the 38th parallel and attempt to retake the entire Korean peninsula, expanding the war effort well beyond its originally stated objective of retaking South Korea from the communists. With MacArthur advancing through North Korea toward the Chinese border, Mao's Communist Party orchestrated a defensive effort to support the DPRK. The Chinese People's Liberation Army entered the Korean peninsula in October, with support from the Soviet air force. By December it had pushed back across the 38th parallel.[72]

As the situation in Korea deteriorated, many in the United States expected the reappearance of rationing and other direct controls. Hoarding and panic buying followed. Inflation soared. As a result, long-term U.S. Treasury bonds came under significant pressure for the first time since before the 1949 recession. For over a year, Treasury bonds had been trading well above par. Demand from financial institutions had been strong, even with low interest rates. But as inflation took off, institutional investors—mainly insurance companies and savings banks—now anticipated a decline in the support rate. They began dumping their Treasury bonds on the Fed to avoid booking a capital loss.[73] Between September 1950 and January 1951, the

[72] See Hao Yufan and Zhai Zhihai, "China's Decision to Enter the Korean War: History Revisited," *The China Quarterly*, no. 121 (1990): 94–115; Paul Edwards, *Korean War* (Westport, CT: Greenwood Press, 2006).
[73] Robert L. Hetzel and Ralph Leach, "The Treasury-Fed Accord: A New Narrative Account," *FRB Richmond Economic Quarterly* 87, no. 1 (2001): 40–44.

Federal Reserve acquired more than $800 million of Treasury bonds.[74] Debt monetization was once again putting pressure on the peg.

In hopes of addressing the problem, Fed chair Thomas McCabe spoke with President Truman and Treasury Secretary Snyder on numerous occasions in the Winter of 1950-51. McCabe explained to the administration that sticking to the peg was resulting in the monetization of the public debt in a period of inflation, much as it had in the immediate postwar era. When an insurance company sold its bonds to the Fed, the Fed credited the insurance company's account at a member bank, which created new reserves. Because consumer demand was unusually high, and demand for bank loans was strong, new reserves enabled credit expansion and fueled the inflationary fires.

Truman was unmoved by McCabe's arguments. He privately pressed McCabe to "stick rigidly to the pegged rates on the longest bonds." Allowing the bottom to drop from under the securities market, Truman warned, was "exactly what Mr. Stalin wants." Treasury Secretary Snyder, for his part, blamed the Fed itself for the debt monetization problem. The FOMC had "jiggled the market" and created uncertainty by openly challenging the Treasury. If they would just make a firm public commitment to the peg, selling would cool off.[75]

One day after making this private accusation, Snyder blindsided McCabe with a surprise public address to the New York Board of Trade. In it, he announced that

[74] Paul Heffernan, "Bond Fluctuations Lowest on Record," *New York Times*, January 2, 1951.
[75] These conversations were all relayed by McCabe in the January FOMC meeting. Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, January 31, 1951," 1951, 9–10, 12–13.

the 2.5% peg on long-term bonds would be retained for the duration of the Korean War. What's more, he strongly (and falsely) implied that McCabe had agreed to this policy in meetings with Truman. To Snyder's credit, the announcement seemed to work. It stabilized the bond market, allowing the Fed to wind down its open market portfolio to some extent as market demand reappeared for the first time in months.[76] But the move antagonized Federal Reserve officials who had not agreed to any such stabilization program, particularly Eccles and Sproul. It even led some officials who had previously supported the long-term peg to change their minds.[77]

On January 29, the FOMC responded to Snyder's announcement with another unilateral move on interest rates, this time lowering the support price for long-term bonds by 1/32 of 1%. Even though bond prices were still slightly above par, Snyder read this as an attack on his announced program and requested an unprecedented meeting between Truman and the entire FOMC. The meeting decided nothing. Nonetheless, the White House issued a press statement shortly after asserting that the Federal Reserve had committed to "maintain the stability of Government securities as long as the emergency lasts." This, like Snyder's earlier public statement, was patently untrue. Marriner Eccles responded to the subterfuge by leaking a memo containing the Board of Governors' own account of the meeting with Truman to the press. The memo clearly showed that the FOMC had not agreed to the stabilization program. The White House was trying to strong-arm the Fed.[78]

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[76] "Comment on Business and Finance: Monetary Policy," *New York Herald Tribune*, January 19, 1951.
[77] Meltzer, *A History of the Federal Reserve, Volume 1*, 701–2.
[78] Meltzer, 705–6.

As the interagency feud ramped up in February 1951, it became the topic of heated congressional debate. Republican Representative Fred Crawford of Michigan sided with the Federal Reserve, agreeing with Marriner Eccles' contention that the peg made the Fed into an "engine of inflation," and deriding Truman for not "know[ing] any more about financing than the average school boy."[79] Democratic House Majority Leader John McCormack came to the Treasury's defense, arguing that the drive for higher rates was nothing more than "a cloak for an effort on the part of certain sectors of the financial community to use the national emergency for selfish advantage." For McCormack, the idea that people could be enticed to buy bonds by marginally higher rates was a fallacy. What investors wanted from bonds was not yield, but confidence in the stability of the market. Over the past decade, the peg had helped the Federal Government build the confidence necessary to recruit an "army of bondholders." Through a combination of stabilization and aggressive marketing, the Treasury was finally succeeding in bringing nonbank buyers back into the government security market. Allowing the Fed to destabilize the market now, in the midst of a national emergency, would put all this effort to waste.[80]

Allies of the Federal Reserve in the Joint Committee on the Economic Report responded to this kind of claim by commissioning a report on "The Economic and Political Hazards of an Inflationary Defense Economy." Reading more like a manifesto than a congressional policy document, the report argued that "debauchery

[79] "Reserve Board Assalied by Snyder in Fiscal Row," *The Philadelphia Inquirer*, February 6, 1951.
[80] John McCormack, "Speech on the Management of the Federal Debt," February 5, 1951, 15–16, https://fraser.stlouisfed.org/archival-collection/john-w-snyder-papers-1918-1980-1347/speech-transcript-management-federal-debt-delivered-2-5-1951-floor-72959.

of the currency" was the "most powerful and most subtle sixth column propelling capitalistic countries toward communism." Inflation created political instability that made conditions ripe for communist organizing. What's more, attempts to control inflation through targeted controls progressively eroded the freedoms that were at the heart of the American capitalist economy. If Truman's efforts to fight communism abroad led to inflation at home—and, subsequently, to increasingly severe price, wage and credit controls—then the effort would be self-defeating. One could not fight communism with communism.[81]

Bankers enthusiastically embraced the effort to equate targeted controls with communism. This was especially true when it came to credit controls that limited the banks' freedom over their investment portfolios—namely, reserve requirements. In early February, the habitually obstreperous ABA president James E. Shelton condemned reserve requirement increases as a "socialistic step" that expropriated the earnings of banks assets. Shelton was referring to an increase in reserve requirements that the Board of Governors had instituted in December 1950, in an attempt to offset some of the credit expansion caused by insurance companies and savings banks selling off their bond portfolios to the Fed. But just as it had been during the first postwar inflation, the largest banking lobby in the country was still more interested in denouncing the Fed's attempt to contain credit expansion than it was in addressing the expansion itself.[82] Although some prominent bankers, like Russell Leffingwell,

[81] Staff of the Joint Committee on the Economic Report, "Economic and Political Hazards of an Inflationary Defense Economy," February 23, 1951, 2–3, 19.
[82] Shelton argued that bank credit expansion was not a problem to begin with. Bank loans were indispensable for defense mobilization. Since they financed only "essential production," he argued that

privately lobbied Truman to drop the peg, the American Bankers Association still refused to take a public position on the issue.[83]

The minutes of the February 1951 meeting of the Federal Advisory Council gives a clue as to why bankers were so reluctant to speak out against the peg. Much like Treasury officials, they were still uneasy about the stability of the bond market. In the meeting, the bankers stressed the need for cooperation and conciliation between the Federal Reserve and the Treasury. FAC president Edward E. Brown, who had testified in the Douglas hearings that it would be acceptable to allow Treasury bonds to go below par, now changed course. "The situation is different now," he said. "A drop below par might result in a considerable dumping of bonds." Brown went on to parrot Treasury talking points that slight changes in interest rates would be ineffective. At any rate, he thought that a dispute over 1/32 of a percentage point on Treasury bonds was surely not so consequential that it was worth upsetting the bond market over. "There must be no fear by the people as to the future prices of government bonds," Brown maintained. The other bankers agreed. CEO of Chemical Bank N. Baxter Jackson summarized the mood in the room. While the bankers agreed on the "general undesirability of pegs, … we have had pegs in the market for so long that they cannot be completely dropped at present." Another banker, marginally more

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the credit expansion was actually *deflationary*, since it bank loans increased the volume of production faster than they increased purchasing power. "Reserve Board Move Is Scored By A.B.A. Head," *New York Herald Tribune*, February 6, 1951.

[83] Gerald Epstein and Juliet Schor's excellent article on the Treasury-Fed Accord leans heavily on the papers of Russell Leffingwell to demonstrate the weight of bank lobbying behind the deal. While Leffingwell was certainly influential in banking circles, and a clear-eyed opponent of the peg, his opinion was less representative of bankers in general than Epstein and Schor's narrative suggests. Epstein and Schor, "The Federal Reserve-Treasury Accord."

amenable to the Fed's position, suggested that the emphasis should be on "maintain[ing] an orderly bond market within narrow limits," rather than rate flexibility as such.[84]

This trepidation infuriated Fed officials. Governor Szymczak shot back that "most members of Congress believe that the house is on fire, and the Board should rise up and assert its independence." Unable to contain his temper, Marriner Eccles (now demoted to Vice Chair) chastised both the Federal Advisory Council and the American Bankers Association for their "lack of leadership" and blamed their diffidence for the current impasse with Treasury. Never before had Eccles "seen such bankruptcy as now exists in the A.B.A. and the Council."[85]

This outburst was a long time coming. For years, bankers had consistently undermined Eccles's attempts to control inflation through reserve requirements, especially his proposed secondary reserve plan. But they had also refused to put their weight behind the Fed's push for interest-rate flexibility. The vice chair thought this was outrageous, given that even the "socialistic" governments of Britain, Canada and Sweden had all managed to let their long-term debt fall below par. And yet here in America, the supposed bastion of free enterprise, bankers stood idly by. If the bankers continued in their obstructionism, Eccles threatened, they would get much worse than a capital loss on their books. The Truman administration would resolve the deadlock between the Fed and the Treasury by resorting to an outright "freeze of bank credit."

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[84] "Minutes of Meeting of the Federal Advisory Council, February 18-20, 1951," 1951, 4, 5, 14, https://fraser.stlouisfed.org/files/docs/historical/nara/fac_minutes/fac_19510218.pdf.
[85] "Minutes of Meeting of the Federal Advisory Council, February 18-20, 1951," 14–15, 17.

The bankers were unmoved by Eccles' tirade. De Witt Ray, of the National City Bank of Dallas, deadpanned that if Eccles had used that same kind of salesmanship with the Treasury, he wasn't surprised that there was an argument.[86]

But Eccles' assessment of the threat was spot-on. Just days after the FAC meeting, Truman summoned Thomas McCabe and Allan Sproul to the White House for a meeting. Sproul and McCabe did not know the purpose of the meeting before it was called, but when they arrived Truman distributed a memorandum outlining a program to reconcile the Treasury and Federal Reserve position.[87] The plan, developed jointly by the Office of Defense Mobilization and the CEA, floated three strategies for restricting bank credit while maintaining the peg. First, bankers would be asked to engage in a program of voluntary restraint. Second, Truman would ask Congress to give the Federal Reserve power to increase reserve requirements. Third, and most extreme, the President would use provisions in existing laws—the Emergency Banking Act of 1933 and the Trading with the Enemy Act—to directly constrict bank lending. This third provision would put all banks, whether or not they were members of the Federal Reserve system, under the direct control of the Secretary of the Treasury. As one journalist put it, it would allow the Truman

[86] "Minutes of Meeting of the Federal Advisory Council, February 18-20, 1951," 15–16.
[87] Little was decided at the meeting itself, apart from rehearsing now-familiar positions. Sproul wanted to eliminate "artificialities" in the market. Treasury and the CEA worried that lowering the peg would "create an avalanche of selling." McCabe raised concerns about private debt monetization but affirmed the FOMC's commitment "to maintain an orderly and stable market but to depend as far as possible on the judgment of the market itself." Notes on the meeting were taken by William McChesney Martin Jr., who was then the Assistant Secretary of the Treasury. See William McChesney Martin Jr., "Meeting in Cabinet Room, White House, February 26, 1951, 11AM-12PM," February 26, 1951, https://fraser.stlouisfed.org/archival-collection/william-mcchesney-martin-jr-papers-1341/reports-472962?start_page=139.

Administration to "simply step in and tell any bank whether it could or could not make a loan, and how much, if any."[88]

Truman's proposal made the front page of the *New York Times*.[89] It also attracted vitriol in the financial press. The *Wall Street Journal* said Truman was taking a page out of the playbooks of Joseph Stalin and Nazi economics minister Hjalmar Schacht.[90] The American Bankers Association, on the other hand, still wasn't ready to rock the boat. ABA president James Shelton, who was usually quick to denounce anything with the faintest whiff of socialism, meekly assured the Truman administration of bankers' cooperation. Shelton added only the humble suggestion that "all possible avenues of approach to the solution of this problem should be taken along voluntary lines before further laws and regulations are employed in this field."[91]

Shelton likely had his eye on the market for bank-eligible Treasury securities, which was slipping. The market for these issues weakened dramatically after Truman's announcement. As turnover increased, the longest bank-eligible bonds dropped to their lowest quoted prices in nearly a year.[92] Conventional wisdom attributed this weakness to the uncertainty caused by the public dispute over the

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[88] Alfred Friendly, "Truman Acts To End Money Policy Feud," *The Washington Post*, February 27, 1951.
[89] Felix Belair Jr., "Truman Asks Plan to Cut Bank Loans," *New York Times*, February 27, 1951.
[90] "Credit Control and the Debt," *Wall Street Journal*, February 28, 1951.
[91] George A. Mooney, "Bankers Fearful of U.S. Controls," *New York Times*, March 4, 1951, sec. Business and Finance.
[92] "The Bond Markets," *Wall Street Journal*, February 28, 1951. The Fed remained committed to the long-term peg at this point, and set a floor on these issues. But the lower prices were still above par, so it did not stop the decline.

peg.[93] Given the circumstances, is likely that Shelton and the ABA—much like the FAC—were primarily concerned with ending dispute and settling markets, rather than supporting the Fed's gambit for monetary policy autonomy.

Reaching Accord

Resolution finally came in early March 1951. After several days of phone calls and meetings between Treasury and Fed officials, the two agencies came to an informal understanding. From then on, the Federal Reserve would no longer support pegged rates, only orderly markets. In return, the FOMC would help the Treasury to stabilize the long-term bond market: it would support the long-term marketable (but bank-restricted) 2.5% bonds at 22/32% above par while Treasury made an offer to convert these marketable bonds to a nonmarketable issue offering a higher yield of 2.75%. The new, nonmarketable bonds would give holders an option to convert them on demand to a marketable five-year note yielding 1.5%.[94]

This conversion offer was tailored to provide exactly the kind of orderly transition to unpegged rates that the financial sector had hoped for (particularly insurance companies).[95] The new higher yielding bond was nonmarketable, so it would absorb some of the excess churn in the bond market. This would help stabilize

[93] See, e.g., "Comment on Business and Finance," *New York Herald Tribune*, March 2, 1951.
[94] Board of Governors of the Federal Reserve System, "Thirty-Eighth Annual Report of the Federal Reserve Board Covering Operations for the Year 1951," 4.
[95] Insurance companies were most vocal supporters of the exchange offering. This is not surprising, considering that they were the primary holders of the long-term bank-restricted bonds, and the drivers of recent monetization. Major insurance industry associations urged insurance companies to "support the exchange offering to the maximum possible extent." "Life Insurance Firms Urge Full Support of Treasury Bond Plan," *Wall Street Journal*, March 10, 1951.

other bank-eligible issues as well. At the same time, the higher yield generously compensated investors for lost liquidity. The terms were especially generous considering that the option to convert to a lower-yielding, five-year marketable note on demand allowed investors to hedge against any precipitous rise in bond yields in the future. Barry Eichengreen and Peter Garber calculate the net value that this conversion provided to investors at $1.2 billion dollars (roughly $12 billion in 2020 dollars).[96] In short, the Treasury absorbed the cost that a disorderly transition to a regime of flexible interest rates would otherwise have imposed on the bondholders.

None of the details of the agreement were made public at the time. The only public messaging approved by the Treasury and the Fed was a terse and rather cryptic press release issued on March 4, 1951:

> The Treasury and the Federal Reserve System have reached full accord with respect to debt-management and monetary policies to be pursued in furthering their common purpose to assure the successful financing of the Government's requirements and, at the same time, to minimize the monetization of the public debt.[97]

Historians, reading this statement with the benefit of hindsight, have taken it as a declaration of the Fed's independence from the Treasury—a pivotal moment in the transition to a free government securities market.[98] But this was not at all clear at the time. The *Wall Street Journal*, for example, commented days after the Accord was reached that "its help in checking inflation is not likely to be great." Specifically, the fact that the Treasury was offering non-marketable bonds was seen as evidence that it

[96] See Eichengreen and Garber, "Before the Accord," 199–200.
[97] Board of Governors of the Federal Reserve System, "Thirty-Eighth Annual Report of the Federal Reserve Board Covering Operations for the Year 1951," 4.
[98] See Hetzel and Leach, "After the Accord," 58; "Treasury-Federal Reserve Accord - Background."

would still "shy away from making a thorough test of the government's 'going rate' of interest in a free market."[99]

Even in news outlets that characterized the post-Accord bond market as "free," there were still critical questions about what a "free" market actually meant. For instance, would the Federal Reserve still stabilize the market during a period of new Treasury offerings? As the *New York Times* commented, it was common practice for securities underwriters to keep the market stable until a new issue was "digested." This practice, moreover, was "consistent with maintenance of what the financial district holds to be a 'free market.'" So if the Federal Reserve was going to allow a "free" bond market, would it keep the market stable during new issues?[100]

As it turned out the Federal Reserve would indeed keep the market stable during new issues in the decade to come.[101] Its continued guarantee of orderly markets also meant that it would remain fairly active in all segments of the government securities market. Indeed, while the goal of the Accord might have been to minimize monetization of the debt, both the Treasury and the Fed recognized from the beginning that this goal would be significantly tempered by the imperative to keep markets orderly. Assistant Treasury Secretary (and soon-to-be Fed Chair) William McChesney Martin Jr. noted in the meetings leading up to the Accord that while the Treasury was "fully prepared" to see interest rates adjust, they wanted rates "as nearly

[99] "More on the Treasury--FRB Accord," *Wall Street Journal*, March 7, 1951.
[100] "U.S. Bonds Dip Anew in the Free Market," *New York Times*, March 10, 1951, sec. Business & Finance.
[101] I explore the Federal Reserve's so-called "even keel" policy of stabilizing the market during periods of Treasury financing in the next chapter.

as possible adjusted by market forces in an orderly market and not driven to … [a] higher level." Thomas McCabe, for his part, readily conceded that maintaining orderly markets was a necessity, even though "maintenance of orderly markets will entail some further monetization."[102]

There was in fact no real reversal in the overall level of debt monetization following the Accord. In early 1951, the Federal Reserve owned slightly less than 14% of the Federal debt. That percentage shot up rapidly in the run-up to the Accord and plateaued at between 16% and 17%, where it remained until 1954.[103]

This did not bother bankers. In the immediate aftermath of the Accord, bankers were just as worried that a newly empowered Fed would be too aggressive in its efforts to constrain monetization (and restrict bank liquidity) as they were about inflation. We can find evidence of this sentiment in bankers' opposition to a bill floated by Senator Douglas around the time of the accord.

Douglas, the Federal Reserve's key congressional ally, was skeptical that the Accord would truly relieve the pressure on the Fed to support the bond market. It was, he reasoned, only an informal agreement, made behind closed doors. And it made no explicit statement about the abandonment of the peg. The Illinois Senator therefore introduced a resolution in Congress to clarify and formalize the terms of the Accord. The resolution essentially repeated the recommendations that Douglas's subcommittee of the Joint Economic Committee had made a year earlier. It stated that

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[102] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, March 1-2, 1951," 1951, 11, 19.
[103] See Sriya Anbil and Mark Carlson, "The Re-Emergence of the Federal Reserve Funds Market in the 1950s," *FEDS Notes*, March 22, 2019.

(1) the Federal Reserve bore primary responsibility over the cost, supply, and availability of credit, and (2) that the Treasury must subordinate its debt management policy to the credit policies of the Federal Reserve. Where the Accord was an informal statement of cooperation, Douglas wanted clear-cut legislation to cement Federal Reserve dominance. This, he thought, would "give added courage to the Reserve System so that it will not be forced by the Treasury to buy an unlimited supply of Government securities."[104]

Bankers—even those who publicly supported the abandonment of the peg—were not happy with this proposal. One journalist's survey of opinion among major New York bankers found that it "ranged from mild disapproval to irreconcilable opposition." While the bankers were ready to embrace some interest rate flexibility, they worried about the consequences of giving "dictatorial" control to the Federal Reserve in the money markets. If the power of the Fed was not checked by the Treasury, bankers feared that the Federal Reserve might turn into "a reincarnation of the Second Bank of the United States."[105]

Bankers framed their opposition to Fed dominance in terms of an abstract desire for "check and balances."[106] But it is not difficult to surmise the real motivation for their opposition. They feared that Federal Reserve dominance would allow the Board of Governors to excessively constrain bank liquidity and bank profits. This was, after all, the major complaint about the Second Bank of the United

[104] Felix Belair Jr., "Six Senators Urge New Credit Policy," *New York Times*, March 7, 1951.
[105] John Elliott, "N.Y. Bankers Unite Against Douglas Plan," *New York Herald Tribune*, March 11, 1951.
[106] Elliott.

States. That bank was founded in the early 19th century largely to constrain the power of state-chartered banks to issue their own bank notes. This limited the profitability of the state banks and constrained their liquidity position. It also made the proto-central bank extremely unpopular among bankers.[107] The situation was similar for bankers in the early 1950s. They had seen the Federal Reserve Board of Governors relying on reserve requirement increases for the past six years, and presumably feared that an unconstrained Federal Reserve would be too concerned with stopping inflation by limiting commercial banks' access to liquidity and not concerned enough with bank profitability. Cooperation with the Treasury, on the other hand, would ensure that the liquidity and stability of the bond market would remain high priorities, even in a flexible interest rate regime. The Treasury's need for liquid, orderly bond markets provided a necessary counterweight to the Fed's anti-inflationary bias.

Appraising the Accord

The aftermath of the Accord was neither "free markets" nor Federal Reserve dominance, but a regime of flexible, orderly markets, managed with the needs of both the financial sector and the Treasury in mind. In a sense, it was a victory for the Federal Reserve. Gerald Epstein and Juliet Schor aptly describe the agreement as an

[107] The Second Bank of the United States would build up portfolios of notes issued by the state-chartered banks. When it wanted to constrain lending, it would present these notes to the state banks for redemption. This was the closest analogue of monetary policy that the bank conducted. As one historian points out, these measures were not well understood by state-chartered banks, who saw only that the Second Bank of the United States "made the state banks pay, when what they wanted to do was lend. To the state bankers … this was oppression." Bray Hammond, *Banks and Politics in America from the Revolution to the Civil War* (Princeton, NJ: Princeton University Press, 1957), 283–84.

"inside entente" between members of the Treasury and the Federal Reserve, designed to head off the more radical direct credit control proposals of the CEA and the Office of Defense Mobilization.[108] On the other hand, the Accord also preempted the threat of Douglas's legislative proposal, which would have institutionalized the Federal Reserve's primacy in markets for U.S. government securities.[109]

The Accord was a compromise, in short. It was a middle road between a regime of pegging and credit controls that would freeze the market in government debt, on one hand, and an untethered market that would allow violent swings in security values in order to achieve monetary policy objectives, on the other. This middle road, I have argued, was the ideal arrangement for the financial sector. The goal of the banking sector in the early 1950s was not, as Jonathan Kirshner argues, "to aggressively to seize control of monetary policy and ensure that no matter what, inflation would be kept low."[110] While bankers were certainly concerned about inflation, their primary concern was preserving the optionality that a liquid market in Treasury debt offered them. As long as secondary markets for sovereign debt were relatively stable and highly liquid, Treasuries provided bankers with the option to limit their exposure to both economic downturns and volatility in credit demand. If the market for Treasuries was carefully managed and orderly, they could provide bankers with a reliable, safe store of value. Bankers were also concerned that this

[108] Epstein and Schor, "The Federal Reserve-Treasury Accord."
[109] This point is persuasively made by Sarah Binder and Mark Spindel. See Binder and Spindel, *The Myth of Independence*, chap. 5.
[110] Kirshner, *Appeasing Bankers*, 124.

store of value would remain reasonably remunerative. So, interest rates could not be too low.

Proposals to immobilize Treasury debt, like the secondary reserve requirement, eliminated this optionality. If bankers were required to hold Treasuries, then they could not shift out of them on demand as more lucrative avenues of investment became available. Conversely, the possibility that the Federal Reserve would be too aggressive in its attempts to stop inflation also eroded the value of this optionality. If the financial sector could not be reasonably sure that it could sell its Treasury securities in the secondary market as needed, without taking too much of a capital loss, then Treasuries started to look less like a safe money-substitute (that is, a place to temporarily store value in the absence of better investment opportunities) and more like an investment that needed to be held to maturity. For bankers, this was the ultimate significance of "orderly markets."

The Accord was not, by any means, the end of the story. Though it is often treated as an historic turning point, the actual content of the agreement remained ambiguous for years to come. In the years following the Accord, the Federal Reserve sought to clarify the meaning of the Accord and the tenuous balance it struck between "market" rates of interest and liquidity support to prevent disorderly conditions. The result was what Fed chair William McChesney Martin called the "bills only" doctrine, in which the Fed limited open market operations to the shortest end of the maturity spectrum. As we will see in the next chapter, while Martin was keen to equate this new policy with a return to "free markets," in practice, new forms of

liquidity support made this claim more of a public relations campaign than a substantive change in policy.

6. A RETURN TO "FREE MARKETS": WILLIAM MCCHESNEY MARTIN JR. AND THE BILLS ONLY POLICY

Shortly after the Treasury-Federal Reserve Accord, Thomas McCabe resigned as chair of the Federal Reserve's Board of Governors. Truman promptly nominated Assistant Secretary of the Treasury William McChesney Martin Jr. to replace McCabe. Martin was a natural pick. He came from the Treasury; but he had been president of the New York Stock Exchange earlier in his career. He had a good working relationship with Treasury Secretary John Snyder; but he was also popular among bankers. In his acceptance speech, he spoke of the need for "a strong, vigorous, independent, and responsible Federal Reserve System," while also promising that the Fed would work with the Treasury to "promote the welfare of the Government securities market."[1]

The historical literature on Martin's tenure as Federal Reserve chair tends to emphasize his embrace of a "strong, vigorous, independent" Fed more than his dedication to the welfare of the Government securities market.[2] He is most often remembered for his vision of the Fed as a "chaperone who has ordered the punch bowl removed just when the party was really warming up."[3] This is no accident.

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[1] William McChesney Martin Jr., "Statement on His Taking Oath of Office," April 2, 1951, https://fraser.stlouisfed.org/title/statements-speeches-william-mcchesney-martin-jr-448/statement-taking-oath-office-7765.

[2] See, e.g., John H Wood, "William McChesney Martin, Jr.: A Reevaluation," *Federal Reserve Bank of Richmond Region Focus*, Winter 2006, 2–7.

[3] William McChesney Martin Jr., "Address before the New York Group of the Investment Bankers Association of America," October 19, 1955, https://fraser.stlouisfed.org/title/statements-speeches-william-mcchesney-martin-jr-448/address-new-york-group-investment-bankers-association-america-7800. Peter Conti-Brown takes Martin's quip about the punchbowl as the defining statement of the

Martin himself promoted the idea that the Federal Reserve would guard the integrity of the money supply against the inflationary demands of elected governments. He also was also keen to equate the Treasury-Federal Reserve Accord with a "transition to free markets."[4] No longer would the market price of government securities represent an arbitrary decision of the Treasury and the FOMC, Martin argued. Under his leadership, interest rates on Treasuries would reflect the true composite evaluation of market participants.

To Martin, the operational meaning of "free markets" was limiting open market operations to the short end of the maturity spectrum as much as possible—a policy that came to be known as "bills only." The objective was for monetary policy to appear univocal and legible to market participants: The Fed was either buying Treasury bills or selling Treasury bills, expanding reserves or contracting them, easing or tightening. In stark contrast to Marriner Eccles' extensive use of regulatory powers in the late 1940s (which often pushed in the opposite direction of open market policy), a simplified, one-dimensional monetary policy would be Martin's goal. Martin believed that such a policy would make the Fed's actions more predictable and transparent to private dealers. This, in turn, would increase dealers' willingness to make the market in government securities—and thereby enhance the private market's "breadth, depth and resiliency."

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ideology of Federal Reserve independence. Conti-Brown, *The Power and Independence of the Federal Reserve*.

[4] William McChesney Martin Jr., "The Transition to Free Markets: Remarks at Luncheon of the Economic Club of Detroit," April 13, 1953, https://fraser.stlouisfed.org/title/statements-speeches-william-mcchesney-martin-jr-448/transition-free-markets-7780.

Martin publicly argued that his bills only policy was a key step toward restoring free markets in government securities. The reality was more complex. While his speeches often celebrated Fed independence and market pricing for Treasuries, Martin did not by any means relinquish the Fed's commitment to actively guaranteeing the liquidity and stability of the government securities market. Martin's Federal Reserve not only intervened in the longer end of the yield curve numerous times to rescue a failing Treasury issue or correct disorderly conditions; it also developed new techniques to mitigate volatility and ensure market liquidity that did not fit under the simplified rubric for open market operations that Martin promoted. Under Martin's leadership, the Federal Reserve privately adopted an "even keel" policy of money market stabilization during periods of Treasury refinancing, which ensured that the Fed's monetary policy objectives would not interfere with the success of a new issue. It also made increasing use of repurchase operations with nonbank government securities dealers to ensure that bids in the government security market would never dry up. At the same time, the Treasury turned commercial banks into underwriters of its issues through new cash management policies that channeled more funds into its commercial bank accounts, known as Treasury Tax & Loan (TT&L) accounts.

Significantly, these techniques of liquidity management were relatively opaque to the public. Where making outright sales or purchases in the open market were clearly monetary policy decisions, liquidity provision through "even keel" policy, dealer repo and TT&L accounts appeared as technical adjustments that could

easily be taken out of the spotlight. These techniques were certainly interventions in the government securities market—no less than standard open market operations. But they stabilized liquidity conditions in the Treasury market without *appearing* to support it. More importantly, they allowed the Federal Reserve to impose a program of monetary restraint without compromising the liquidity of the government securities market. In a cold war environment, when free market ideology comingled with huge defense budgets, this was crucial. Federal Reserve policy could be legitimated through references to "free markets" and subjecting the Treasury to "market discipline", while simultaneously delivering liquidity support through the back door. Such measures helped to naturalize liquidity as the product of, rather than an institutional precondition for, private markets in sovereign debt.

The Fed, Rudderless

The March 1951 press release announcing that the Treasury and the Federal Reserve had reached "full accord" on their respective roles in the government securities market left much to the imagination. As noted in the previous chapter, the Accord did not say anything about a "free market" in government debt. In fact, it did not even offer a concrete proposal for how the Federal Reserve and the Treasury would divide responsibility for conditions in the government securities market. Turning the vague language of the Accord into a concrete program was the first task that William McChesney Martin Jr. faced in his term as Fed chair.

Early in his term, Martin made public statements sketching out his vision for the post-Accord Fed. The members of the FOMC, he explained, would chart a middle course: "[we] don't intend to support prices of government bonds on a pin-point peg, nor let the market go completely on its own, without regard to orderly conditions."[5] Many in the financial sector were unclear on what this actually meant, however. Shortly after Martin's confirmation, the *New York Herald Tribune* complained that the Fed still seemed to be supporting pegs on key issues of bonds, but only sporadically—on a "now-you-see-it-now-you-don't basis." The unpredictable nature of support was itself causing substantial market uncertainty, with buyers postponing purchases in order to see what the Federal Reserve would do. Sarcastically, the *Tribune* concluded that this, "presumably, is another instance of what the Federal Reserve open market committee quaintly calls an 'orderly market.'"[6] The bankers on the Federal Advisory Council, for their part, were troubled by the "unsettlement and nervousness in the Government bond market" after Martin took office. The Council urged the Fed to make market stability—not interest rate hikes—its first priority.[7]

Federal Reserve officials responded to these lines of criticism by giving public talks to bankers attempting to clarify and elaborate on the meaning of orderly market policy. In June, the Investment Bankers Association of America sponsored a seminar

[5] Associated Press, "Governments Hold Firm Tone to the Closing," *St. Louis Post-Dispatch*, May 11, 1951.
[6] "Comment on Business and Finance," *New York Herald Tribune*, May 5, 1951.
[7] As they had before the Accord, FAC members claimed they were "not in favor of a pegged government bond market," but did believe that "the bond market should have a chance to stabilize itself." "Minutes of Meeting of the Federal Advisory Council, May 13-15, 1951," 1951, 1, 12, https://fraser.stlouisfed.org/files/docs/historical/nara/fac_minutes/fac_19510513.pdf.

on the topic at Wharton, featuring vice-president of the Philadelphia Federal Reserve, Karl R. Bopp.[8] Bopp began by detailing the problems associated with the peg. First and foremost, Bopp argued, the peg had a built-in procyclical bias. Since fixed yields became less and less attractive as inflationary expansion heated up, inflation could only lead to a spiral of further monetization as bondholders dumped their securities on the Federal Reserve. Conversely, fixed yields became more attractive during a business slump, which encouraged the financial sector to hoard government bonds rather than investing in business. This procyclical bias made the peg untenable.

Even so, Bopp argued, the solution to the problem was not "free markets":

> It is tempting to believe that the way out of the dilemma of fixed markets is a restoration of free markets. We must, however, beware of appealing phrases. On this point I venture two judgments; first, that you men in this room could not agree on an operational definition of a free market, and second, that if you were to agree, the definition would contain 'arbitrary' elements.

Bopp went on to point out how disastrous it would be for financial markets if the Federal Reserve suddenly decided to liquidate its Treasury holdings. Such an action would destroy the money supply, as the Reserve Banks held more than enough Treasuries to wipe out the entirety of member bank deposits. It would also cause a

[8] Joseph Peyton, of the Minneapolis Fed, addressed the Upper Midwest Bankers Association around the same time. He assured them that "it is and always will be the objective of the Federal Reserve System to maintain an orderly government bond market." While this was not a "pegged market" the Fed would always act to "eliminate undesirable extreme price movements in either direction." Herb Paul, "Peyton Hails Unpegging of Bonds as Brake on Inflationary Pressures," *Minneapolis Star*, April 21, 1951.

collapse in the government security market, which could not possibly absorb such a huge quantity of Treasuries all at once. Perhaps, Bopp mused, the Federal Reserve could offset the monetary effects of such sales by purchasing private loans. But would a market in which the Fed held billions of private loans be any "freer" than a market in which it held billions in government securities? Bopp thought not. He concluded that "such appealing and apparently precise conceptions as a 'natural' or 'free' market in Government securities become either woozy or arbitrary or both upon analysis." The only possible solution, he argued, was *orderly* markets. After presenting two catastrophically untenable antitheses, Bopp presented this as the only sane choice. The Federal Reserve would continue to intervene in order to allay temporary panics and maintain confidence in the integrity of the market. But it would also allow rates to fall if bondholders were selling off their holdings in order invest elsewhere.[9]

Even with such clarifications, however, the ambiguous language of the Accord and the general commitment to orderly markets did not amount to a defined policy stance. Allan Sproul pointed out in a September 1951 speech that the Accord was little more than a "loose formulation"—an unreliable guide "in a world of changing personalities and economic situations." What was needed, Sproul thought, was active guidance from the private banking community.[10]

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[9] Karl R Bopp, "Role Of Government: Remarks before the Investment Banking Seminar at the Wharton School of Finance and Commmerce," June 20, 1951, https://fraser.stlouisfed.org/files/docs/historical/frbphi/presidents/bopp/bopp_lec_19510620.pdf.
[10] John Elliott, "Sproul Chides Bankers As Defaulting Leaders," *New York Herald Tribune*, September 29, 1951.

But bankers were missing in action. As we saw in the previous chapter, American Bankers Association was conspicuously silent on the question of the Fed's relationship to the government securities market in the run-up to the Accord. As of September 1951, it had still never taken a formal position on the issue. Now that Fed officials had won a political victory with the Accord, Sproul argued that bankers could no longer "leave it to someone else when it comes to the great issues of monetary, credit and banking policies." They would need to step up to the plate if they wanted monetary policy that would work for the financial sector.[11] The ABA initially dismissed this line of criticism. In its 1951 annual convention, outgoing president James Shelton said that while bankers all had a high regard for Sproul, his criticisms were without merit. The ABA's silence was a mark of statesmanship, not lack of leadership.[12]

When push came to shove, the ABA had no real incentive to get embroiled in a conflict between the Fed and the Treasury. If the Treasury tended to emphasize market stability at the expense of inflation control and higher rates and the Fed tended to take the reverse position, private bankers preferred a middle ground between these positions to any definitive resolution. They wanted stable liquid market for government securities, so that they could always adjust their portfolios at low cost; but they also wanted interest rates that were as high as possible without jeopardizing market stability. For this reason, it would take more than moral pressure from Allan

[11] Elliott.
[12] George A. Mooney, "Shelton Dismisses Sproul's Criticism," *New York Times*, October 1, 1951, sec. Business & Finance.

Sproul to make bankers spring into action. The ambiguous middle ground was comfortable. In the end, what it took to goad the ABA (and much of the broader financial sector) into taking a clear position on the Federal Reserve-Treasury conflict was the threat that the Federal Reserve would be nationalized. Nationalization would both endanger banks' infrastructural power in the monetary system and raise the prospect of excessively low interest rates for the foreseeable future. Such outcomes were unacceptable to the financial sector.

The Patman Inquiry

After World War II ended, central banks were nationalized in France, England, Argentina, Romania, Yugoslavia, Hungary, Czechoslovakia, India and the Netherlands. Every new central bank that was created between 1937 and 1948, moreover, was state-owned.[13] Toward the end of 1951, it looked like the United States might be poised to follow suit. In October, a joint House-Senate subcommittee chaired by Texas Representative Wright Patman distributed an official questionnaire to Treasury officials, Fed officials, bankers, bond dealers and many other major players in the financial sector. Like the Douglas committee's investigation a year prior, this was ostensibly an open-ended inquiry into the relationship between the executive branch and the Federal Reserve. The main theme of its questions was how much power the President and his Treasury Secretary ought to have over monetary

[13] Miroslav A. Kriz, "Central Banks and the State Today," *The American Economic Review* 38, no. 4 (1948): 565–80.

policy decisions. Unlike the Douglas committee, which was overwhelmingly sympathetic to the Federal Reserve, this investigation was launched by Wright Patman, a well-known antagonist of the Fed. Patman was a perennial thorn in the side of the Federal Reserve's Board of Governors and openly advocated for the consolidation of presidential authority over monetary policy. Understandably, Fed officials were convinced that Patman's questionnaire was part of a campaign to nationalize the Reserve System.[14]

In response to the announcement of the Patman inquiry, William McChesney Martin called on bankers to join him in a fight to for the "basic concepts of freedom," which included private control of the banking industry. He was particularly emphatic about the need to fight off the threat of nationalization and to maintain the institutional position of private finance in the Federal Reserve System. The representation of private bankers on the boards of the regional Federal Reserve Bank was, Martin argued, the only thing keeping the Fed from becoming "a central institution with authoritarian powers." European countries, drifting toward communism if not already explicitly communist, nationalized their central banks. In the United States, the Federal Reserve was "unquestionably the main bulwark of our private enterprise system."[15]

This message resonated with the private financial sector. Bankers, said one journalist, were "thoroughly alarmed" by Patman's maneuvers. W. Randolph Burgess

[14] "Treasury-FRB Questionnaires," *Wall Street Journal*, October 11, 1951.
[15] Martin Jr., William McChesney, "Statement for the Press: Summary of Remarks before the 57th Annual Convention of the Kentucky Bankers Association, Louisville, Kentucky," October 23, 1951.

of National City Bank declared that Patman was out to debauch the currency. Winthrop Aldrich of Chase Bank argued that the Federal Reserve should have complete control over credit policy. And, for the first time, the American Bankers Association took a public position on the issue. ABA president C. Francis Cooke proclaimed that "we must make certain that no steps are taken which may undermine the foundation of [the Federal Reserve's] independence."[16]

Even those who had previously been critical of the Federal Reserve's campaign to end the peg were now inspired to defend Federal Reserve independence. Aubrey Lanston, one of the nation's largest government security dealers at the time, spoke out at a meeting of the Arizona Bankers Association urging bankers to respond to the Patman questionnaire. Bankers, he said, urgently needed to demonstrate a consensus that "the normal functioning of the nation's banking and credit machinery must be administered by private hands."[17] Less than a year earlier, Lanston had publicly defended the Treasury position, arguing that the Treasury had better judgment about the needs of the market than the Fed, and that withdrawal of bond market support would be "intolerable." Even if many in the financial sector wanted higher rates, Lanston said at that time, the "determining element in the equation" had to be "the maintenance of investor confidence." This required "a stable and confident Treasury security market" that would not be subject to "abrupt manipulation" by the

[16] John Elliott, "Bankers Rally To Defense of Reserve System," *New York Herald Tribune*, December 16, 1951.
[17] Aubrey G. Lanston, "Let's Have an Independent Federal Reserve System!," *The Commercial and Financial Chronicle*, November 15, 1951.

Federal Reserve.[18] But Lanston changed his tune once Patman announced his inquiry. Lanston's business as a bond dealer was dependent on relative predictability and stability in the bond market—hence his initial support for the Treasury position in its disagreement with the Fed. But his business was equally dependent on the *existence* of a private bond market. If Patman got his way, there might not be a secondary bond market at all.

Patman's questionnaire evinced an obvious interest in strategies for "insulating" government securities from the impact of restrictive monetary policy on private financial markets. While Patman was not always explicit on this point, "insulation" of the Treasury market meant restrictions on trading and liquidity—that is, shrinking or eliminating the secondary bond market. Eccles' secondary reserve plan was one such insulating measure, as it would legally require banks to maintain Treasury holdings and thereby prevent banks from liquidating as many of their government securities during an upswing. Increased issuance of nonmarketable Treasury securities was another insulating measure, since it would remove much of the Treasury debt from secondary markets. Patman's wartime proposal for requiring the Fed to directly monetize Treasury debt was yet another. If the Fed bought government securities directly from the Treasury, they would never pass through a private secondary market to begin with. For a bond dealer, even more than for a banker, such insulating measures were an existential threat.

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[18] Aubrey G. Lanston, "Treasury-Federal Reserve Dispute: An Address given before the Pennsylvania Bankers Association," February 12, 1951, https://fraser.stlouisfed.org/archival-collection/marriner-s-eccles-papers-1343/treasury-federal-reserve-dispute-464502.

Allan Meltzer, author of the definitive multi-volume history of the Federal Reserve, argues that the Patman hearings and questionnaire were little more than a chance for opponents of the Treasury-Federal Reserve Accord to air their grievances about a fait accompli. By the time that hearings were held in early 1952, Meltzer writes, "Treasury was not eager to reopen the issue."[19] And it is true, as Meltzer points out, that Patman ultimately failed to pass any of his subcommittee's recommendations through Congress (they proposed instituting reserve requirements on nonmember banks and instituting labor representation on Reserve Bank boards, among other things). Nonetheless, the hearings were significant in unifying the financial community against a common enemy. In their responses to the Patman questionnaire, bankers now universally approved of the abandonment of par support in the government bond market. Government security dealers, for the most part, did as well. Dealers still disapproved of both the timing and manner of the Accord. They argued that it should have been done in a period of market strength, like 1949, rather than in a period of market weakness, like 1951, and that the open-ended conflict between Treasury and Federal Reserve sowed too much confusion in the market. Still only one dealer recommended resuming the peg in their response to the questionnaire.[20]

The Patman inquiry also brought to light some lingering controversies surrounding the policy of maintaining orderly markets. Patman, for one, seem

[19] Meltzer, *A History of the Federal Reserve, Volume 1*, 715n239.
[20] Joint Committee on the Economic Report, "Monetary Policy and the Management of the Public Debt: Replies to Questions and Other Material for the Use of the Subcommittee on General Credit Control and Debt Management, Part 2" (Washington, DC, 1952), 1160–68, 1273–79.

convinced that the Federal Reserve's continued commitment to orderly markets meant, essentially, an implicit, adjustable peg. Throughout the hearings, he badgered witnesses in an attempt to uncover this unstated floor on bond prices.[21] Rather than using the smoke and mirrors of "orderly markets" to disguise market support, Patman implied that if the Fed was going to support the market, it might as well return to explicitly pegging bonds at par. Congress could then authorize the reserve requirement increases necessary to prevent excessive debt monetization.[22] Witnesses on the other side of the political spectrum shared Patman's diagnosis, if not his prescription. Milton Friedman, for example, testified that "'Orderly markets' has become a semantic cloak hiding the desire to resist all price declines." He dissented from the recommendation, advanced by many of his fellow economists, that the Federal Reserve should intervene to correct financial disorder resulting from monetary restriction. For Friedman, such interventions would only distort market price signals.[23]

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[21] Patman seemed to think that the FOMC was supporting bond prices at around 96% of par. He pointedly asked several witnesses—including Allan Sproul, John Snyder and insurance executive Carroll M. Shanks—whether the FOMC was supporting "an orderly market around 96." Each denied it, but Patman kept asking. "Monetary Policy and the Management of the Public Debt," § Hearings before the Subcommittee on General Credit Control and Debt Management of the Joint Committee on the Economic Report, 82nd Congress, 2nd Session (1952), 64, 459, 539.

[22] Even witnesses who were generally supportive of the Federal Reserve's autonomy expressed concerns about "orderly markets" giving the Fed carte blanche to establish an informal, discretionary peg. Aubrey Lanston, for example, noted "the tendency … to slip from the requirements of an orderly market into a kind of official intervention that might be described as 'flexible support.'" Monetary Policy and the Management of the Public Debt, 395.

[23] Already at this early stage in his career, Friedman had sketched out the basics of the monetarist position that "general control over the quantity of money" was the best tool for macroeconomic management. Friedman argued that measures to insulate the government securities market from the effects of credit restriction, such as orderly market interventions, direct controls on bank lending, or requirements that commercial banks hold government security reserves (viz., the Eccles plan), reduced the efficiency of the credit system by arbitrarily altering the pattern of yields. Joint Committee on the

Friedman and Patman were outliers. The majority of witnesses in the hearing (and respondents to the questionnaire) were broadly on board with the idea of orderly markets. Few agitated for an outright return to the peg and even fewer argued that the Federal Reserve should leave markets on their own in the event of a financial disorder. As Marion Folsom, Chair of the business-led Committee for Economic Development, explained, the United States had already "crossed the bridge of allowing Government bonds to fall below par," and markets were none the worse for it. As market participants became more acclimated to the idea of flexible rates, there would be little risk that a decline in rates would produce a financial panic. Still, this was only true as long as "care is taken to ensure orderly market conditions."[24]

Even within this new consensus position, however, there was considerable disagreement about what orderly markets policy should look like. Truman's Council of Economic Advisers, who had been among the staunchest supporters of the peg before the Accord, now tried to stake out a compromise position. In its response to the Patman questionnaire, the CEA argued that there was a spectrum of possibilities between "free" and "pegged" markets. The Federal Reserve's conception of orderly markets—where short-term price fluctuations were moderated, but longer-term upward or downward price trends were allowed to develop—was only one possibility. Another possibility was "stable markets"—with price levels fluctuating moderately around a stable price. Unlike rigidly pegged markets, stable markets would introduce

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Economic Report, "Monetary Policy and Management of the Public Debt: Replies to Questions, Part 2," 1069, 1299–1300.

[24] Monetary Policy and the Management of the Public Debt, 295–96.

an element of risk to investors. This moderate risk would be sufficient to solve the monetization problem associated with pegging. Long-term bonds, if allowed to fluctuate, would no longer be as risk-free as short-term bills. This would allow a reasonable spread to develop between short- and long-maturity securities. Unlike in the Federal Reserve's conception of orderly markets, however, investors could remain confident that their average rate of return over the long run would remain stable. This would reduce speculative instability and encourage ownership outside the banking sector. Low, stable rates would also encourage real economic growth.[25]

Fed officials scoffed at this idea. As far as they were concerned, orderly markets and stable markets were not merely adjacent rungs on the same ladder, as the CEA suggested. Indeed, they could not be further apart. Allan Sproul blasted the CEA's conception of stable markets as "an invitation to a pegged market, whether so intended or not." If the Federal Reserve agreed to predetermine a "moderate range" of fluctuation for interest rates, market participants would "quickly probe to find out what are the limits of [the] 'moderate range,' and the lower limit of that range will become a peg."[26]

Chair Martin elaborated this position in his questionnaire response. If the CEA's concept of order-as-stability made prices a matter of government fiat, the Federal Reserve's concept of orderly markets would ensure that prices remained fundamentally tethered to the real economy:

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[25] Joint Committee on the Economic Report, "Monetary Policy and Management of the Public Debt: Replies to Questions, Part 2," 881–84.
[26] Monetary Policy and the Management of the Public Debt, 516–17.

> Orderly markets mean markets without "air pockets," that is, markets where there is a degree of continuity between demand and supply at going or moderately changed prices. Orderly markets preclude erratic movements of prices and yields of securities that have no justification in terms of general economic and credit conditions, but they do not preclude broad movements that reflect changes in basic underlying forces.[27]

Where the CEA foregrounded the desirability of stability and low rates as a precondition for real economic growth, Martin's formulation made it clear that interest rates should follow, and not lead, "basic underlying forces" in the economy. But if interest rates were to be a "reflection" of fundamentals, the FOMC would be the mirror. Whether price movements were erratic and disorderly or grounded in the real economy remained irreducibly a matter of discretionary judgment.

This discretion was a problem for private dealers. Government securities dealers operated on incredibly thin bid-offer spreads. Highly leveraged positions were necessary to make a profit. The unpredictability of Federal Reserve interventions into the bond market could therefore be immensely disruptive to their business. What's more, under the "recognized dealer" system, government securities dealers needed to meet a number of formal qualifications before they could transact with the Federal Reserve's Open Market Account. These included both quantitative measures (such as "volume and scope of business" or "capital at risk") and qualitative ones (such as "integrity," "honor" and "willingness to make markets under all ordinary conditions"). During the war, these qualifications were further extended to include a

[27] Joint Committee on the Economic Report, "Monetary Policy and the Management of the Public Debt: Replies to Questions and Other Material for the Use of the Subcommittee on General Credit Control and Debt Management, Part 1" (Washington, DC, 1952), 296.

requirement that dealers "cooperate with the … Federal Open Market Committee in maintaining an orderly market for Government securities" and "refrain from making any recommendations or statements or engaging in any activity which would encourage or stimulate undue activity in the market for Government securities."[28]

With these requirements in place, the Federal Reserve's policy of guaranteeing orderly markets and suppressing "air pockets" could weigh heavily on dealers' business. As *New York Times* financial columnist Paul Heffernan argued,

> If this qualifier is to hold over … the much-touted 'free market' for Government bonds, so far as the market-making activities of dealers are concerned, can only be as 'free' as the central bank will permit. 'Extraordinary' market conditions, 'undue' activity and 'orderly' market are things no 'recognized' dealer would dare define for himself.[29]

The Fed's discretion in orderly market policy, in other words, made it difficult to legitimate Federal Reserve supremacy in the money markets by gesturing toward an abstract "freedom."

Some witnesses in the Patman hearings went further, arguing that the very idea of free money markets was a kind of category error. The prominent Keynesian economist Seymour Harris stated bluntly that "the money market is not a free market." Harris argued that there was no coherent way to talk about a free interplay of supply and demand because "Authority determines supply, and the direction of the

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[28] Board of Governors of the Federal Reserve System, "Thirty-First Annual Report of the Federal Reserve Board Covering Operations for the Year 1944," 50; see also Garbade, "The Early Years of the Primary Dealer System."
[29] Paul Heffernan, "'Open-Mouth' Rule Ends in U.S. Bonds," *New York Times*, March 9, 1952, sec. Business Financial.

flow of money."[30] Where the supply of steel or refrigerators is subject to real cost-of-production constraints, the supply of money is not. The central bank simply purchases government securities and creates purchasing power without cost. Harris was not alone in this sentiment. When Representative Patman asked Treasury Secretary Snyder whether the market in government securities was a free market, operating according to the laws of supply and demand, Snyder responded simply, "No, I do not consider so."[31]

Applying free-market supply-and-demand formulas to the market for Treasuries may have been incoherent, but this was no deterrent for those who wanted to see money markets guided by a semi-private Federal Reserve that was highly responsive to the financial sector. The American Bankers Association argued in its testimony that the Federal Reserve's control of interest rates meant that the Treasury was forced to "go into the market as a borrower and not as a printer of money through the debt-creation mechanism." This would make it "dependent upon prevailing and prospective conditions of supply and demand for funds in a money market that is geared to a sound credit policy." The Investment Bankers Association of America reiterated the point, arguing that it was "the proper function of the Treasury to issue its securities in a free market." Insurance executive and industry lobbyist Carroll M. Shanks, for his part, noted that orderly market operations would be possible without

[30] Monetary Policy and the Management of the Public Debt, 384.
[31] Monetary Policy and the Management of the Public Debt, 64.

contradicting the overall idea that "supply-and-demand forces should be permitted to exert their influence."[32]

Martin's Ad Hoc Subcommittee

The Patman hearings did not result in any legislation. What they did do is galvanize bankers and bond dealers to defend themselves against congressional encroachment on their infrastructural power. The "free market" was a normative lodestar in these debates, even if the concept was operationally incoherent.

Fed Chair William McChesney Martin Jr. understood the public relations value of the free market concept. He knew that the legitimacy of the Federal Reserve depended on its claims to be a steward, and not a manipulator, of the market. But he also recognized that there was no straightforward way to implement a "free" government securities market. What made the government securities market valuable to institutional investors was precisely that it was *not* subject to excessive volatility—that it remained orderly, continuous, and liquid. The stability of the secondary market was not a result of an underlying fundamental value of U.S. Treasuries. Quite the reverse: the fundamental value of Treasuries was the result of a stable secondary market.

In the aftermath of the Patman hearings, Martin attempted to tease out this dilemma. He formed an ad hoc subcommittee of the FOMC with a mandate to study the "effectiveness and extent of System operations in the direction of providing an

[32] Monetary Policy and the Management of the Public Debt, 327, 347, 446.

adequate market for Government securities in carrying out the commitment of the FOMC to maintain an orderly market."[33] The study was focused primarily on the impact of open market operations on government security dealers. Martin hoped that if open market operations were restructured to minimize disruption to private dealers, those dealers would be more inclined to continuously make the market. Ideally, the enhancement of private liquidity provision would obviate the need for direct liquidity support from the Federal Reserve. Orderly markets could, to some extent, be privatized.

From its beginning, this was an effort to make the government security market work better for dealers and major investors. There was little pretense of benefitting the general public. Martin hired Robert H. Craft, a New York banking executive and chair of the Governmental Securities Committee of the Investment Bankers Association of America, to spearhead the investigation as a full-time technical consultant.[34] Craft would do the organizational work, Martin would chair the subcommittee, and two other FOMC members, Abbott Mills and Malcolm Bryan,

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[33] The Ad Hoc Subcommittee was initially proposed on May 7, 1951—before the Patman hearings began. But the subcommittee did not begin its work until May 19, 1952. When the Ad Hoc Subcommittee completed its report, it noted that "The interval, amounting to nearly a year, between the authorization of the subcommittee and its actual establishment reflected the desirability of deferring the study until the conclusion of the hearings of the Patman subcommittee." The full report of the Ad Hoc subcommittee is reproduced in "United States Monetary Policy: Recent Thinking and Experience," § Hearings before the Subcommittee on Economic Stabilization of the Joint Committee on the Economic Report, 83rd Congress, 2nd Session (1954); cf. Winfield Riefler, "A Chronological Record of the Origin of the Ad Hoc Subcommittee," 1958, https://www.federalreserve.gov/monetarypolicy/files/FOMC19580303memo01.pdf.

[34] Months earlier, Craft had been among the most outspoken public opponents of Patman's proposals to subordinate the Federal Reserve to the executive branch. He had stressed the necessity of preserving Federal Reserve supremacy in the money markets as a means of putting a check on "spending, borrowing and the creation of money." It seems he was rewarded for his outspokenness. K. Ames Smithers, "IBA Opposes Any Effort to Subordinate Federal Reserve Board," *Wall Street Journal*, November 27, 1951.

would join. The study itself consisted mostly of off-the-record meetings with prominent government security dealers, along with a handful of individuals who were "intimately familiar" with the government securities market.[35]

Starting in June 1952, Martin's ad hoc subcommittee conducted 21 meetings with government security dealers and 8 meetings with non-dealers who were major investors in the government securities market. In March 1953, they reported their findings to the full FOMC. The principal finding was that there was a "disconcerting degree of uncertainty among professional dealers and investors in the Government security market with respect both to the occasions which the Federal Open Market Committee might consider appropriate for intervention and to the sector of the market in which such intervention might occur." This, the subcommittee continued, was "detrimental to the depth, breadth, and resiliency of the market." The recommended solution to the problem was for the FOMC to refrain from any open market operations designed to impose a particular pattern of yields. Open market sales and purchases should be used solely for monetary and credit policy objectives. The goal should be increasing or decreasing the quantity of commercial bank reserves, in other words—not managing the yield curve. The best way to ensure adherence to this narrowed mandate was to forego operations in long-term sectors of the market and operate as much as possible in short-term Treasury bills. Restricting Fed operations to the bill market would allow private dealers to set the yield curve through arbitrage

[35] The final report states that stenographic notes of the meetings were taken for the convenience of the subcommittee, but that the subcommittee had not received consent from the discussants to include transcripts of the meetings. United States Monetary Policy: Recent Thinking and Experience, 260.

operations. The policy would also provide dealers with a set of "ground rules" for Federal Reserve actions that would make them more transparent and predictable, as Craft pointed out. If dealers were assured that the FOMC wouldn't be making substantial, unpredictable interventions in the market for Treasury bonds and notes, they would be more inclined to make the market continuously. "The financial community should have … an assurance," said Martin, that the FOMC would not continue to "play God."[36]

A related recommendation from Martin's subcommittee was that the FOMC should clarify its policy of maintaining orderly markets. The subcommittee recommended that the System Account no longer be charged with "maintaining orderly conditions in the government security market." Its mandate should instead be pared down to "correcting a disorderly situation in the government security market." This implied a shift from active, day-to-day management of market conditions to a policy of intervening only in exceptional cases of financial panic. Aside from the semantic shift, there would be a new requirement that the Executive Committee of the FOMC sign off on any declaration of a "disorderly" situation. Only after a majority of the Executive Committee declared a situation disorderly could Account Manager enter into long-term markets.[37]

This was necessary, Robert Craft argued, because there was still too much confusion in financial markets about what "orderly markets" meant. Although years

[36] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, March 4-5, 1953," 1953, 31–34, 40.
[37] Federal Open Market Committee, 41–42.

had passed since the Accord introduced flexibility into money markets, "many of the more sophisticated people in the Government securities business were still not convinced that the Federal Open Market Committee had abandoned the theory that the Government securities market must continue to be controlled."[38] The ad hoc subcommittee argued in its report that the FOMC itself bore responsibility for this confusion. The Federal Reserve had "not yet been specific with respect to what it means by a free market for United States Government securities." Since the Accord, it had repeatedly said that "it contemplates operating in a free market from here on out, but at the same time the policy record… shows that it is still committed to the 'maintenance of orderly markets,' which clearly implies intervention." Dealers would only "take positions in volumes and make markets" if they were "confident that a really free market exists."[39] Making it clear that orderly market interventions were the exception, rather than the rule, and limiting day-to-day operations to the bill market were necessary to convince market participants that they the market in which they were participating was, in fact, free.

The third major recommendation of the ad hoc subcommittee's report was a change to the Federal Reserve's policy of supporting Treasury financing. Since the Accord, the Federal Reserve had continued to directly support the market during periods of new Treasury issues, which left it in the position of residual buyer during the financing period. The subcommittee suggested that the FOMC cease its direct

[38] Federal Open Market Committee, 33.
[39] United States Monetary Policy: Recent Thinking and Experience, 266.

support of new issues. This meant that during periods of Treasury financing, it would abstain from purchasing "(a) any maturing issues for which an exchange is being offered, (b) any when-issued securities, and (c) any outstanding issues of comparable maturity being offered for exchange."[40] By refusing to stabilize the market for a specific issue, the Fed would contribute to the overall impression of a free market. New Treasury issues would have to be priced attractively enough to attract private investment, and the Fed would no longer commit to stepping in as a direct residual buyer if market demand failed. Investors, Martin later explained, would get a "fair market valuation."[41]

Still, while the Fed would abstain from narrow, targeted support of Treasury issues, it would still engage in *general* support. It would ensure, in other words, that there were always enough reserves available in the banking system to facilitate Treasury financing. This would be accomplished through open market operations designed to inject the precise quantity of reserves into the system that the Treasury needed to "borrow." The main difference here was that, with the new policy, it would appear that the *market* was lending money to the Treasury rather than having the Federal Reserve monetize the debt. In reality, the measure would simply ensure that money needed for new Treasury issues passed through private hands before it made it back to the Treasury.

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[40] United States Monetary Policy: Recent Thinking and Experience, 271. A "when-issued" transaction refers to buying rights on a security that has been announced but not yet issued.
[41] William McChesney Martin Jr., "The Transition to Free Markets: Remarks at the Luncheon Meeting of the Economic Club of Detroit," April 13, 1953, 9, https://fraser.stlouisfed.org/title/statements-speeches-william-mcchesney-martin-jr-448/transition-free-markets-7780.

Sproul's Response to the Ad Hoc Subcommittee Report

This policy, later labeled "bills only," was received warmly by the rest of the FOMC.[42] The committee passed it unanimously, ratifying it as the new operating procedure. Only Allan Sproul of the New York Fed had serious doubts. In the meeting he raised concerns that establishing "ground rules" would unnecessarily hamstring the System's monetary policy objectives. On what grounds, asked Sproul, should the Fed stay out of the long-term market? Long-term rates had the most direct effects in mortgage and capital markets—effects which were surely salient for credit policy. If influencing credit conditions was at the core of the Fed's mandate, why not enter the long-term market directly, rather than relying on a tenuous chain of arbitrage operations by private dealers in hopes that purchases or sales of bills would eventually translate to changes in long-term rates? Naturally, such a policy would be good for dealers. But enhancing dealer profitability would not necessarily translate into the kind of resilient, liquid markets that the subcommittee hoped for. The government securities market did not lack "depth, breadth and resiliency" because of uncertainty about whether the Fed would enter the long-term market. Rather, it was

[42] Kenneth Garbade points out that, while the policy was popularly known as "bills only," Fed officials never referred to it as such. He refers to the policy as "bills preferably," in order to better capture the language that Fed officials used. "Bills preferably" also shows that there was some operational flexibility built into the policy, particularly when it came to intervening in the still relatively short-term market for Treasury certificates of indebtedness. (There was also the option to correct disorderly markets with long term purchases.) I prefer to stick to "bills only." Even if the FOMC were internally clear about their own flexibility, the external messaging certainty implied that the long-term market would be "free" and left "on its own." In the financial press, the policy was always referred to as "bills only." See Kenneth D. Garbade, *After the Accord: A History of Federal Reserve Open Market Operations, the US Government Securities Market, and Treasury Debt Management from 1951 to 1979* (Cambridge, UK: Cambridge University Press, 2021), 94.

uncertainty about the Federal Reserve's credit policy *in general*: "What the market wants to know," Sproul said, "is whether interest rates and, therefore, security prices are going up or down; this is tied in with the whole question of credit policy."[43]

Sproul also argued that the very fact that the dealers were private, profit-oriented businesses made them unlikely to shore up the liquidity of the Treasury market. An FRBNY study commissioned by Sproul to respond to the ad hoc subcommittee's report concluded that, far from stabilizing the market, dealers tend to accentuate volatility: "it must be remembered that the dealers are operating primarily with a view to making profits, and consequently that their inevitable tendency is to sell short and back away from offerings in a declining market and to extend their positions in a rising market."[44] Turning over responsibility for market liquidity to private dealers would, therefore, be unlikely to increase the "depth, breadth and resiliency" of the market.

Sproul's specific objections to the bills only policy were rooted in a broader suspicion of the ad hoc subcommittee's free market ideology. For the subcommittee, restricting operations to the bill market was crucial for, if not a free market in government securities, then at least a "freer market."[45] Subcommittee member Malcolm Bryan contended that there was a "fundamental difference" between operating in the short-term and long-term markets. Interventions in the bills market merely effected liquidity conditions. Interventions in the long-term market, on the

[43] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, March 4-5, 1953," 34–37.
[44] United States Monetary Policy: Recent Thinking and Experience, 310.
[45] United States Monetary Policy: Recent Thinking and Experience, 259.

other hand, meant that the FOMC was "substituting its judgment for that of the market as to what such interest rates ought to be."[46] Sproul thought this line of reasoning was totally spurious. Whenever the FOMC added or subtracted funds from the market, it inevitably affected both market liquidity and interest rates. As long as the Federal Reserve existed and used open-market operations as its chief policy tool, there was no escaping the fact that FOMC judgment would impact the cost and availability of credit. Indeed, this was the whole point of monetary policy.[47]

Sproul developed this theme in a later memo to Martin: "we shall not be able to avoid 'intervention' in the Government security market. That market, and the expectations of the whole market, is conditioned by Federal Reserve policy and the amount and type of our open market operations."[48] For Sproul, pretending otherwise was simply "reacting violently against market pegging [by] embracing a somewhat doctrinaire attitude on free markets."[49]

Performing Free Markets: Martin's "Transition to Free Markets" Speech

[46] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, March 4-5, 1953," 38.
[47] Federal Open Market Committee, 39.
[48] Allan Sproul, "Letter to FOMC and William McChesney Martin, Jr.," December 4, 1953, 5, Papers of Allan Sproul, https://fraser.stlouisfed.org/files/docs/historical/sproul/sprlet531204.pdf.
[49] Allan Sproul, "FOMC Comments," June 11, 1953, 3, Papers of Allan Sproul, https://fraser.stlouisfed.org/archival-collection/papers-allan-sproul-1174/fomc-comments-3399.

It might not have occurred to Sproul that "embracing a somewhat doctrinaire attitude on free markets" was precisely what Martin was trying to do—at least publicly. A month after the FOMC formally adopted the bills only policy, Martin gave a highly publicized speech to the Economic Club of Detroit entitled "The Transition to Free Markets." In it, he heralded the Federal Reserve's new bills only policy as "return from wartime necessities to the principles of the free market." Where "dictated money rates" under the peg were "characteristic of dictatorships," market prices under the new policy reflected "not just an arbitrary decision by the Treasury and the Federal Open Market Committee but instead the composite evaluation of its worth by thousands of investors in the light of their judgments as to the current and prospective demand and supply of credit."[50]

At the time that Martin delivered his speech, this kind of rhetoric had become boilerplate. 1953 was a year steeped in virulent anti-communism. It was the year when senator Joseph McCarthy was appointed chair of the Senate Permanent Subcommittee on Investigations. It was also the year when Dwight Eisenhower became president, buoyed by suspicions that the Democratic party had become a "stranglehold of Socialists."[51] It is not surprising that Martin would lean into the political winds of the time, employing simplistic cold war binaries to legitimate a complex policy position. More to the point, the invocation of the free market provided political cover for Federal Reserve autonomy. As Martin's biographer

[50] Martin Jr., "The Transition to Free Markets," April 13, 1953, 4, 11.
[51] See, e.g., B.A. Homps, "The Reds Won't Vote for Eisenhower," *Los Angeles Times*, October 27, 1952.

Robert Bremner explains, "Martin believed that the Fed would be better protected from political pressure if it could say it was operating in a free-market environment rather than one in which it set the tone." Long-term rates, particularly mortgages, were politically sensitive. As long as the Fed restricted itself to the market for Treasury bills, it could make a claim that longer rates were set by "market forces," thereby insulating itself from Congressional demands.[52]

The speech was more than just political posturing, however. Martin was sincerely invested in the ideal of free markets. And his ad hoc subcommittee had concluded that instituting free markets was about convincing market participants to *believe* the market was free, as much as it was about any substantive policy of non-intervention. This was the deeper purpose of Martin's speech: performatively enacting "free" markets.

Martin observed in his speech that, despite the unpegging of the government security market in 1951, there were still many "unsatisfactory aspects of the market … [which were] related in large part to the psychology that pervaded the market." A free market required investors that were attuned to the economic fundamentals. In the current market, however, "Professional operators … appeared confused with respect to the elements they should consider in evaluating future market trends." Rather than "making market judgments for themselves," dealers, brokers and other individual investors "were chiefly interested in trying to find out what the Federal Reserve

[52] On this point, Bremner cites a personal interview with Robert C. Holland. In 1953, Holland worked on the trading desk at the Federal Reserve Bank of Chicago. Robert P. Bremner, *Chair of the Fed: William McChesney Martin Jr., and the Creation of the Modern American Financial System* (Yale University Press, 2008), 101–2.

planned to do and how it was going to operate." Correcting this "confused psychology" and reorienting investors toward fundamental values would be crucial if the free market were going to function as a price discovery mechanism, rather than simply a way to speculate on what the Federal Reserve would do next. This required convincing investors that the Federal Reserve would itself base policy determinations on its evaluation of economic fundamentals and not on the needs of the Treasury market. In other words, Martin had to make the case that Federal Reserve officials "should not be the judge of what an orderly market is." Even if the Fed would still intervene to correct "disorderly" conditions, it would have to be "extremely careful about intervening unduly."[53]

The paradox in this position was that the Federal Reserve's support of the government securities market could not be bracketed off from economic fundamentals. Investors were not "confused" in their focus on what the Fed would do. The opposite was true. They recognized that the Fed's actions *constituted* the fundamentals of the market. In the months following Martin's speech, this point would become increasingly difficult to ignore.

Eisenhower, Humphrey, and the 30-Year Bond Issue of 1953

On the same day that Martin gave his speech, Dwight Eisenhower's Treasury issued $1 billion worth of new 30-year marketable bonds at 3.25%—the first new

[53] Martin Jr., "The Transition to Free Markets," April 13, 1953, 6–7, 11.

long-term Treasury issue since the end of the war.[54] This issue sent an unmistakable signal: unlike the Truman administration, the Eisenhower administration would not shy away from setting rates at a level that was attractive to investors.

Although it was the Truman administration that had agreed to the Accord in 1951, for the remainder of Truman's time in office, Treasury Secretary John Snyder refused to issue bonds at a rate higher than the 2.5%. Unwilling to reopen the Accord negotations with the Fed, and equally unwilling to pay a higher market price for a new long-term bond, Snyder's Treasury simply avoided issuing long-term debt altogether, relying exclusively on short-term issues to meet its needs.[55] This culminated in a progressive shortening of the maturity profile of the outstanding debt. From 1947 to 1952, the average maturity of the debt went from ten years and five months to five years and eight months.[56] Shorter debt meant greater liquidity for holders. Most investors held short-term Treasuries—particularly bills—as a money substitute.[57] So as the maturity profile of the debt contracted, the effectiveness of Treasury security issues in removing purchasing power from the economy declined.

Eisenhower was determined to break this pattern. On the campaign trail, he ridiculed the Truman administration's proclivity for soft money. Inflation was deliberate policy, he argued, aimed at fooling the American people with a "deceptive

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[54] Allan H. Meltzer, *A History of the Federal Reserve, Volume 2, Book 1: 1951-1969* (Chicago: University of Chicago Press, 2010), 59–60.
[55] Bremner, *Chair of the Fed*, 91.
[56] Garbade, *After the Accord*, 107.
[57] This is true for nonfinancial corporations as well as banks. On the use of Treasury bills as money substitutes in the nonfinancial corporate sector, see James Elias Walter, "Government Securities as a Money Substitute" (Dissertation, Berkeley, CA, University of California, 1953).

prosperity."[58] That prices had been relatively stable since the brief inflationary episode of 1951 ended did not seem to count for much in Eisenhower's book. He announced that his Treasury would make inflation control its top priority and even signaled his support for Senator Douglas's program of Federal Reserve supremacy in the money markets. Upon entering office, the new president stuck to this line. In his first State of the Union address, Eisenhower contended that the dispute between the Fed and the Treasury under Truman's leadership had "helped to encourage inflation." His administration, in contrast, would make balancing the budget and extending the maturity profile of the federal debt its first order of business.[59] This would ensure that more of the debt was placed with long-term holders, rather than financial institutions and corporations who simply needed a short-term cash substitute. Establishing his administration's hard money bona fides, he wagered, would prevent any further conflict with the Federal Reserve.

Eisenhower's appointments to the Treasury aimed to do just that. His pick for Treasury Secretary, Ohio industrialist George M. Humphrey, was a "businessman's businessman" and an outspoken advocate of fiscal austerity. At the time of his

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[58] Eisenhower said, "The inflation we suffer is not an accident; it is a policy. It is not, as the Administration would have us believe, some queer and deadly kind of economic bacteria breathed into the atmosphere by Soviet communism … The point and purpose of this policy I have already indicated: to fool the people with a deceptive prosperity. The method is very simple: to give more people more money that is worth less." Eisenhower also blamed Truman's incoherent policy for the conflict between the Treasury and the Federal Reserve, and implied that his administration would fix the problem: "We shall not allow our Government agencies to fight at the expense of the American people. We shall create an atmosphere in which the Federal Reserve Board, as an independent agency, and the Treasury Department act not as political economies but as economic allies in the war upon inflation." "Text of Eisenhower's Speech to GOP Rally in Cleveland on His Program Against Inflation," *The Washington Post*, September 24, 1952.

[59] See "Text of President Eisenhower's State of the Union Message to Congress," *New York Herald Tribune*, February 3, 1953.

appointment, Humphrey served as chair, president or director of no fewer than 39 companies, including the National City Bank of Cleveland.[60] His guiding philosophy, expounded to Eisenhower at great length during trips to Humphrey's Georgia plantation, was that "New Dealism was spending the country into bankruptcy."[61] At Humphrey's prodding, Eisenhower appointed Joseph Dodge, a prominent Detroit banker and former president of the American Bankers Association, to engineer major cuts to his first Federal budget.[62] Eisenhower's other Treasury appointments hammered the hard-money message home. W. Randolph Burgess, another former ABA president and former member of the Federal Advisory Council, would be Special Deputy to the Secretary of the Treasury on Debt Management and Monetary Policy; Marion B. Folsom of the Eastman Kodak company would be Undersecretary of the Treasury on Tax Policy. Both publicly pledged their fealty to hard money and Federal Reserve autonomy in the money markets. Burgess proclaimed balanced budgets to be "the most sacred principle of sound money," while Folsom pledged that the Treasury would take no action to undermine the authority of the Fed.[63]

Such was the political environment surrounding Martin's "Transition to Free Markets" speech, in April 1953. With Eisenhower in office, and the Treasury packed with sympathetic bankers, the Federal Reserve was finally in a position to dictate what such a transition to free markets would mean. Equally important, by 1953,

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[60] Drew Pearson, "Clay Put Humphrey in Treasury," *Washington Post*, January 14, 1953.
[61] William I. Hitchcock, *The Age of Eisenhower: America and the World in the 1950s* (New York: Simon and Schuster, 2018), 89.
[62] Hitchcock, 100.
[63] Peter Kihss, "Eisenhower Picks 3 Treasury Aides," *New York Times*, December 15, 1952.

commercial banks' exposure to the government securities market had been significantly reduced. As Figure 4 illustrates, the ratio of commercial bank loans to government security holdings had risen from 57% in February 1948 to 111% in April 1953. This development meant that the banking sector would be less vulnerable to capital loss if rates on government securities shot up, and therefore more amenable to tight monetary policy. The simultaneous announcements of the 3.25% 30-year Treasury bond and the Federal Reserve's policy of non-intervention on new Treasury issues sent a signal to bond investors that the time to test out a "free market" policy had arrived.

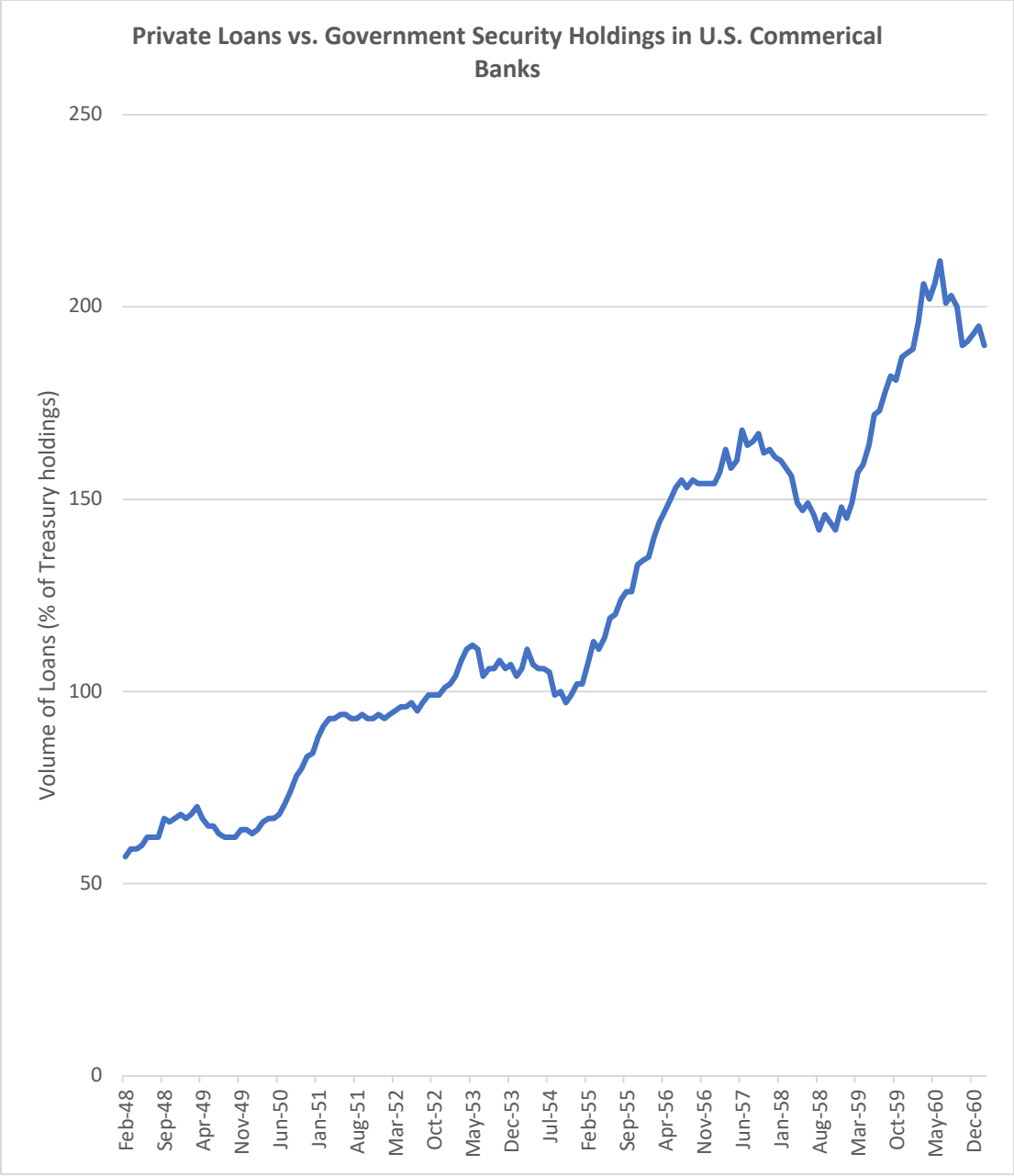

Figure 4: Private Loans vs. Government Security Holdings in U.S. Commercial Banks, 1948-1961

Source: Federal Reserve Board of Governors, compiled in Edwin Dickens, "Bank Influence and the Failure of US Monetary Policy during the 1953–54 Recession," International Review of Applied Economics 12, no. 2 (1998): 221–40.

The experiment was controversial. Democratic congressional leaders and prominent Keynesian economists baulked at the terms of the new issue, criticizing the Treasury for raising interest rates and increasing the cost of government finance unwarrantedly.[64] Harvard economist Seymour Harris penned a letter to the editor in the *New York Times* arguing that the new administration's "penchant for the free market" led it to ignore the fact that the government securities market has always been "manipulated." "[C]ontrol of the interest rate," Harris declared, "is a price that has to be paid to assure freedom in other markets." With inflation fairly low, Harris saw no good reason to allow higher Treasury yields to "demoralize the Government bond market."[65] Wright Patman followed suit. He claimed the rate increase would lead to a "dangerous spiral of interest rate increases for private borrowers." This would squeeze farmers, veterans, home buyers and small businesses while generating windfall profits for the financial sector. Patman and 19 other members of Congress subsequently called for legislation that would force the Federal Reserve to reinstate the peg.[66]

With Republicans now in control of both congressional chambers, Democratic clambering for a return to frozen rates did not make much headway. But even if there had been a Democratic majority, the Republicans' emphasis on the free market made their position clearer and more digestible to the public than claims about demoralized

[64] Paul Heffernan, "Free Money Basis Under Final Test," *New York Times*, April 19, 1953, sec. Business Finance.
[65] Seymour E. Harris, "National Debt Policy: Long-Term Implications of Rise in Interest Rate Examined," *New York Times*, April 5, 1953, sec. Editorials.
[66] Associated Press, "Democrats in Congress Urge Federal Reserve Back U.S. Bonds at Par," *Wall Street Journal*, May 11, 1953.

bond markets. Support in the financial press bolstered the Republican position. *New York Times* financial columnist Paul Heffernan mocked the Democratic party's "delusion" and "self-deception" about the inflationary consequences of the peg. Low interest rates were a legacy of depression, Heffernan argued, "a symptom of the anemia which had prostrated the capitalist economy." Depressed rates were then artificially frozen into place by the war economy. Now that the bond market had finally been freed, and the economy was booming, there was no longer any rationale for such unnaturally low rates. Those who protested the yields on the new 30-year bond, Heffernan said, were forgetting that the Treasury was not capable of "raising rates." The market set the rates. Treasury simply responded to the market, tailoring its issue to market demand.[67]

If the new bond issue was tailored to the market, it was a loose fit. 3.25% was well above the going market rate for long-term bonds, leading to substantial oversubscription. Within 24 hours of opening its books, the Treasury had $6 billion of subscriptions for a $1 billion issue.[68] Some of this demand, Treasury Secretary Humphrey worried, was from "free riders"—speculative investors looking to buy only because they expected the bonds to go to a premium, at which point they would sell off their holdings and realize the capital gain. In order to exclude such "free riders," the Treasury weeded out nearly $1 billion worth of subscriptions that were

[67] Heffernan, "Free Money Basis Under Final Test."
[68] Garbade, *After the Accord*, 109.

deemed to be "excessive" and distributed the rest on the basis of 20% of each remaining subscription.[69]

When public trading opened, it initially seemed that Humphrey's effort had succeeded. The issue went to only a modest premium and the *Wall Street Journal* reported that the Treasury had "judged the appetite of the government bond market expertly."[70] But things went south quickly. Within two weeks of their issue, the 3.25% bonds fell below par. Just as Humphrey had feared, speculative "free riders" who were unsatisfied with the modest initial premium on the issue quickly dumped their holdings.[71] This dynamic was reinforced by the perception that the Federal Reserve was holding fast to a tight money policy. The financial columnist J.A. Livingston specifically cited Martin's "Transition to Free Markets" speech as an explanation for the bond market weakness. The message had taken a few weeks to sink in, Livingston argued, but speculative investors got spooked once they realized that Martin meant what he said: "[W]hen the 'free riders' discovered that the ride wasn't really free, that the Reserve wasn't there to guide the market, they sold."[72]

The effect of Federal Reserve policy was not limited to speculators, however. As long as investors believed the Fed would not create new reserves to offset the liquidity drain that the new Treasury issue imposed on the economy, the issue would

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[69] Edwin L. Dale Jr., "New Treasury Bonds Allotted on 20% Basis," *New York Herald Tribune*, April 23, 1953.
[70] "The Treasury Bond Offering," *Wall Street Journal*, April 16, 1953.
[71] "Dip in Issues Is Largest Since Support by Federal Reserve Was Dropped in March, '51," *New York Times*, April 28, 1953, sec. Business Financial.
[72] J. A. Livingston, "Free Riders in New U.S. Bonds Discover High Cost of Ride," *Washington Post*, April 29, 1953.

be forced to compete against an expanding array of opportunities for private investment. With demand for bank loans expanding and the Federal Reserve attempting to constrain available reserves, Treasury borrowing would have to "crowd out" private loans. The fact that the Treasury expected to borrow even more before year's end only exacerbated the situation. If the Federal Reserve remained bent on monetary restriction, it might take even higher rates for the Treasury to attract the necessary investment.[73]

It was not long before the bond market fully broke down under the strain. On May 6, Manager of the Federal Reserve System Open Market Account Robert Rouse reported to the Executive Committee of the FOMC that "outside Treasury bills, there was virtually no market for Government securities at the present time."[74] Of the thirty-seven separate issues of Treasury bonds and notes available on the secondary market, twenty-one reached record lows. Yields on Treasury bills rose as well. Nervousness among traders that the Fed would keep liquidity scarce served to spread the weakness from money markets to corporate bond markets, which also fell to historic lows.[75]

All this was enough to make the Federal Reserve reverse course on "free markets"—at least temporarily. There was a consensus in the May 6 FOMC

[73] *New York Times* columnist Paul Heffernan wrote that the Treasury issues "would have to make their own way among investors in a tight money market in which the Federal Reserve System is little disposed to relax under the present conditions of inflated bank credit." Paul Heffernan, "Bond Performance Stumps Observers," *New York Times*, May 10, 1953, sec. Business Financial.
[74] Executive Committee of the Federal Open Market Committee, "Minutes of the Meeting of the Executive Committee of the Federal Open Market Committee, May 6, 1953," 1953, 2.
[75] "U.S. Bond Trading Near Standstill," *New York Times*, May 5, 1953.

Executive Committee that, while no one was ready to abandon the program of monetary tightening, it was clear that market conditions had gotten out of hand. There was a need for an immediate injection of reserves. Allan Sproul pointed out that the Treasury was going to need new financing in the near future, which would put further strain on the commercial banks' reserve position. Since the Treasury had no option but to roll over its existing short-term debt in an extremely tight market, it "would have to pay whatever rate for short-term borrowing is necessary to displace private credit." "There is no telling how high rates would go," Sproul continued. "If private market factors should stand aside, as they now tend to do, the market might become 'disorderly' before it gets to the equilibrium point." Governor Abbot Mills agreed. There was a need to "'tone up' the market and prevent attrition on Treasury refunding."[76] Just as Sproul had predicted, the Fed could not rely on private dealers to provide the necessary "depth, breadth and resiliency" to the market. When the market started slipping, private dealers did not rush into the void. They stood aside and waited for the Fed to provide a liquidity infusion.

For his part, Martin agreed with the need for a reserve injection, but he wanted to finesse the framing:

> he did not consider the question to be one of helping the Treasury per se … it was a question of whether the rubber band was at a breaking point in the matter of tightness. Thinking in terms of a "free" market, he said, the committee must not get carried away with the idea that the market should not have some element of "elbow room." … anything done to ease the tightness in the market should not be looked upon as a matter of helping the Treasury, … it was an over-all money market

[76] Executive Committee of the Federal Open Market Committee, "Minutes of the Meeting of the Executive Committee of the Federal Open Market Committee, May 6, 1953," 6, 8.

> problem which might be helped or hindered by the Treasury and its financing problem.[77]

Martin was fishing for a way to spin liquidity support that was clearly connected to a Treasury refinancing operation as support for "the market" in general. But, of course, supporting the market could only mean providing the reserves necessary to counteract the tightness created by the Treasury withdrawing them. It meant creating the very money that the Treasury ostensibly "borrowed." In Martin's gloss, however, this was merely a positive externality of the Fed's overall credit policy. It was not the same as substantively intervening with the *intention* of putting a floor on the price of Treasury securities. It was simply providing some "elbow room" for a market that had become too tight.

The bankers on the Federal Advisory Council were more clear-eyed about the issue. In their mid-May meeting, several argued that precipitously declining bond prices were precisely the problem. J.P. Morgan CEO Henry C. Alexander complained about the tightness of the money market, noting that "New York banks have lost deposits and their government bond accounts are down." Alexander pointed out that rising short-term yields on government securities led corporations and foreign governments to purchase Treasury bills rather than depositing money in bank accounts. This was particularly harmful because it drew deposits out of the banking system at a time when banks' reserve position was already strained. Others in the meeting were in firm agreement that conditions were too tight and that bond values

[77] Executive Committee of the Federal Open Market Committee, 11, 13.

were eroding. More than one noted that country banks were unhappy about bond prices falling too rapidly. Given the "unhealthy" psychological effect of such a decline, the bankers questioned the propriety of the Fed's "meat-axe" approach to monetary tightening.[78]

Account manager Robert Rouse was responsive to these complaints. The May 6 meeting of the FOMC Executive Committee concluded with a directive that gave Rouse discretion to decide on the quantity of purchases necessary to stabilize the market situation. The goal was to keep markets steady—not necessarily to loosen market conditions, but to offset any reserve drains that would impose further tightness.[79] During the remainder of the month, the System Account purchased some $150 million worth of bills, substantially increasing the banks' excess reserves. But the market continued to slide. The new 30-year bond dropped even further below par, declining by a half percentage point. Yields on Treasury bills climbed higher.[80] By the beginning of June, the market had again ground to a halt. Investors dumped their bonds on dealers, who responded by successively lowering bids. The market, according to the *New York Times*, was unable to "absorb even light offerings without substantial price declines." Major investors believed there was no end to the downturn in sight.[81]

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[78] "Minutes of Meeting of the Federal Advisory Council, May 17, 1953," 1953, 11, https://fraser.stlouisfed.org/files/docs/historical/nara/fac_minutes/fac_19530517.pdf.
[79] Martin told Account Manager Robert Rouse to "feel his way" in the market. Executive Committee of the Federal Open Market Committee, "Minutes of the Meeting of the Executive Committee of the Federal Open Market Committee, May 6, 1953," 19.
[80] Garbade, *After the Accord*, 116–17.
[81] "Sharp New Losses Occur in U.S. Bonds," *New York Times*, June 2, 1953, sec. Business Financial.

Contrary to market expectations, however, the downward spiral ended abruptly the following day. What turned things around was not a change in economic "fundamentals" or a sudden burst of courage on the part of private dealers. Rather, it was a string of aggressive Federal Reserve purchases. On June 2, the Fed's trading desk placed bids for $81.5 million worth of Treasury bills.[82] This markedly improved dealer confidence and overall market sentiment. The *New York Times* now reported that "instead of retreating before light selling orders, dealers hit the offerings with firm bids … impart[ing] firmness to the market the rest of the day."[83] More significantly, account manager placed bids in the long-term market on behalf of the Treasury, purchasing bonds to the tune of $3.5 million. Since the Fed executed these purchases as an agent the Treasury, for its investment accounts, this action did not technically violate the "bills only" policy. But it made little difference to markets whether the orders were coming from the Fed or the Treasury. The small purchase made a big impact. When chair Martin questioned account manager Robert Rouse why he had not reported a disorderly situation to the Executive Committee in the beginning of June, Rouse explained that he had considered it, but ultimately didn't need to because the $3.5 million purchase "took care of the situation."[84] This was partially a consequence of the fact that the purchase generated rumors that the Federal Reserve was back in the long-term market.[85]

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[82] Garbade, *After the Accord*, 118.
[83] "U.S. Bond Market Stages Good Gain," *New York Times*, June 3, 1953, sec. Business Financial.
[84] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, June 11, 1953," 1953, 17.
[85] Meltzer, *A History of the Federal Reserve, Volume 2, Book 1*, 109.

Treasury support measures and Rouse's stopgap reserve injections reversed the panic. But the bond market was not finally settled until the FOMC formally moved to abandon monetary restraint, starting in June. Shaken by the disorder in the bond markets, the committee unanimously agreed in its June 11 meeting that "there should be an aggressive supplying of reserves to the market during the near future, on a sharply rising basis."[86] In retrospect, this decision appears felicitous, since the economy plunged into an acute recession shortly thereafter. But economic fundamentals were a secondary concern at the time of the meeting. In stark contradiction to the "bills only" policy, the decision to ease was not directed toward the economy in general, but directly toward the market in Treasury bonds.

The meeting began, like most did, with a presentation of an economic review from the Board of Governors staff. The staff argued that that the boom had leveled off and warned of an "undertone of concern about potential decline in economic activity" But their final conclusion was that it was not yet evident that the underlying economic situation called for easing.[87] If monetary policy decisions were purely geared toward macroeconomic conditions, there was little clear indication that easing was necessary.

As a matter of financial stabilization, on the other hand, easing seemed an urgent necessity. Anxious discussion of the bond market "jitteriness" was pervasive in the meeting. Indeed, it was so pervasive that Governor Rudolph Evans complained, more than halfway into a five-hour meeting, that the FOMC had barely touched upon

[86] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, June 11, 1953," 50.
[87] Federal Open Market Committee, 8–10.

the broader economic outlook. To Evans, this indicated that members of the FOMC were still subconsciously attached to the idea of pegging: "Some of the members of the Committee still seem to look upon the Government security market as 'our' market," he said, "and while there was talk of a free market, it was not so clear that a free market was really wanted when we faced the reality of it."[88]

Governor Evans' objections were in vain. Allan Sproul, who had been the main voice on of opposition to the bills only policy, took the June 11 meeting as an opportunity to steer the FOMC away from Martin's vision. Luckily for Sproul, there was a vacancy on the Board of Governors at the time of the meeting, and two other Board members were unable to attend. This gave the presidents of the regional Reserve Banks, who were less enthusiastic about bills only than Martin's Board of Governors, a narrow temporary majority on the FOMC.[89] Sproul exploited this opening to attack bills only. According to Martin's ad hoc subcommittee, limiting intervention to the bill market was supposed to make conditions more predictable for dealers, which would give markets greater "depth, breadth and resiliency." But despite the Federal Reserve's adherence to the policy, Sproul inveighed, "seldom has the market shown less breadth and depth while quotations have shown, if anything, too much resiliency."[90] His proposed solution was removing the hard-and-fast prohibition on open market operations in the long-term sector. "No one here wants a

[88] Federal Open Market Committee, 37.
[89] Meltzer, *A History of the Federal Reserve, Volume 2, Book 1*, 61.
[90] By "too much resiliency" Sproul is presumably making a sarcastic reference to extreme price volatility—that is, to the rapid slide and recovery in the markets. Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, June 11, 1953," 14.

return to pegging nor to try to substitute our judgment as to prices and yields for those of the market," Sproul maintained. Still, he thought that the FOMC

> should be free, particularly at times of Treasury financing, to make purchases in whatever area of the market is under most pressure, so that there will not be an unnecessary erosion of rates, affecting adversely investor and banking psychology and intensifying the restrictive effects of our credit policy at the wrong time.[91]

This argument was convincing to the regional Reserve Bank presidents, who voted with Sproul to rescind the bills only directive. The decision was immediately reversed in the next FOMC meeting, once the full Board of Governors was again in attendance. Nonetheless, the June 11 vote demonstrated that the bills only policy had only tenuous support among the Reserve Bank presidents. They all wanted a "free market." But not at the price of an "unnecessary erosion of rates."

In the meantime, further easing rendered the debate temporarily moot. On June 23, Martin asked the FOMC to recommend a reserve requirement reduction to the Board of Governors. The board complied, releasing $1.1 billion in reserves to the commercial banks. There was no disguising the fact that this reserve requirement reduction was tailored to aid Treasury financing operations. Although a recession would soon come into view, this was not apparent until later in the summer. In late June and early July, it appeared that the Fed was easing at the peak of a business boom.[92] Reporters took note. The reserve requirement reduction was designed to

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[91] Federal Open Market Committee, 15.

[92] The NBER dates the peak of the business cycle to July 1953. While there were some signs of strain in the economy at this point (inventories grew as retail sales decelerated and the stock market had been weak since earlier in the year), most commentators did not yet believe the economy was headed into a recession. Saul Engelbourg, "The Council of Economic Advisers and the Recession of 1953-1954," *The Business History Review* 54, no. 2 (1980): 193.

"meet the Treasury's pressing need for new money," said *New York Times* columnist George Mooney.[93] Elsewhere, improvements in the bond market were directly attributed to the reserve requirement cut.[94] This damaged the Federal Reserve's credibility. Paul Heffernan, another *Times* columnist, noted the hypocrisy of the move. Martin and other Fed officials had repeatedly "pledged the Reserve System against creating a stream of bank reserves on which the Treasury could float issues of debt. Yet when the showdown came on financing the Treasury's deficit, the Federal Reserve did create a money stream to carry the new Treasury debt, and did so by changing reserve requirements." Heffernan blamed the Fed's backtracking from Martin's free market program on the "thinness" of the government securities market. Until the government security dealer infrastructure for producing liquidity became more robust, the Fed would be obliged to repeatedly intervene as episodes of disorderly decline emerged:

> The realization is setting in that until a broad, confident, professional, private core is developed for handling the Treasury's vast marketable debt, most of the talk about refashioning the structure of the public debt and about the Treasury's "paying the going rate" of a "free market" must be regarded as wishful.[95]

[93] George A. Mooney, "Rates of Interest Due to Stay Firm," *New York Times*, July 5, 1953, sec. Business Financial.
[94] "N.Y. Bonds Market: Government Obligations Strengthen," *South China Morning Post*, July 7, 1953.
[95] Paul Heffernan, "U.S. Bond Market Too Thin for Task," *New York Times*, July 12, 1953, sec. Business Financial.

"A Re-education in the Market Concept"

Such criticism left Chair Martin in an awkward position. It was his announcement of a "transition to free markets" after all, that was largely responsible for the panic in the bond markets. And this panic had, in turn, put pressure on him to backtrack from his free market stance to the pre-Accord strategy of managing the government securities market by manipulating reserve requirements. How could Martin free the market if the very act of announcing a free market made the market evaporate?

Reflecting back on the crisis a year later, Martin reframed the problem. It was not that bond markets were inextricably dependent on Fed liquidity support, such that any attempt to "free" them would lead to collapse. Rather, the bond market disorder boiled down to a simple communication failure. The problem was not that lack of Fed intervention led to overly tight monetary policy, but the fact that investors had misunderstood what he meant by a "free market":

> The money supply was quite adequate, in my judgment, in the spring of 1953, until the expectations of the people regarding the Federal Reserve concept of a free market and the administration intentions with respect to interest rates on treasury securities just carried people away. There developed a conviction that there was no need to invest now, because, after all, you would be able to get six per cent on government securities in no time and the Federal Reserve was not going to supply any reserves to the market.[96]

[96] Martin Jr., William McChesney, "Monetary Policy and the Federal Reserve System: From the Proceedings of the 15th Annual Pacific Northwest Conference on Banking," April 8, 1954, 12, Statements and Speeches of William McChesney Martin Jr., https://fraser.stlouisfed.org/title/statements-speeches-william-mcchesney-martin-jr-448/monetary-policy-federal-reserve-system-7786.

It was this mistaken idea that the Fed was going to withdraw from the market and refuse to supply reserves, Martin argued, that caused the speculative panic. But a transition to free markets did not mean that the Fed would refuse to supply the reserves that the Treasury needed. It just meant that the Fed would not bid on the specific issue that the Treasury was offering.[97]

Softening the more doctrinaire stance of his "Transition to Free Markets" speech, Martin now clarified that Federal Reserve projections of the cash needs of the economy would always include the needs of the Treasury:

> We always have to look at the needs of the Treasury. The Federal Reserve is not set up to control the appropriation machinery of the Congress. We're set up to help the government finance itself. We can talk about balanced budgets and I have strong views as an individual, but I have no authority … to try to abrogate the decisions of Congress with respect to appropriations.

All this, Martin argued, amounted to a necessary "re-education in terms of the market concept."[98] Stabilizing bond market expectations required nothing less. Investors needed to know that the Treasury would not be forced to compete with private investors for a limited supply of funds. This was not what the Federal Reserve meant by a free market in government securities. What it did mean was a market in which the Fed's expansion, diminution or stabilization of commercial banks' reserve positions were determined by the Federal Reserve's overall projections of economic activity—*including* the cash requirements of the Treasury.

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[97] Or any issues of similar maturity. As noted above, the ad hoc subcommittee recommended that the Open Market Account abstain from bids on "(a) any maturing issues for which an exchange is being offered, (b) any when-issued securities, and (c) any outstanding issues of comparable maturity being offered for exchange."

[98] Martin Jr., William McChesney, "Monetary Policy and the Federal Reserve System," 14–16.

Martin's explanation of the Federal Reserve's policy stance was certainly consistent. Whether it all amounted to a free market, however, is questionable. For all of Martin's homilies on the unalterable "law of supply and demand," the actual policy that Martin described involved the Fed supplying banks with whatever funds the Treasury demanded.[99] To the extent that the legitimacy of the Federal Reserve depended on its claim to be grounded in the logic of the market—and not the logic of the state—this practice made Martin's fed vulnerable to accusations of propping up the market and monetizing deficits. To maintain its legitimacy going forward, the Fed would need to minimize the appearance of intervention.

New Market Techniques: Dealer Repo, "Even Keel" Policy, and TT&L Accounts

Martin genuinely believed in free markets as an abstract ideal. But the Federal Reserve's response to the 1953 disorder demonstrated that even an independent Federal Reserve could not pursue monetary policy objectives without regard for their impact on the government securities market. Martin wanted investors to feel secure that Fed would swiftly intervene to maintain liquidity in a crisis. This is what he meant by "re-educating" investors in the terms of the market concept. Still, it was equally important to maintain the *perception* that Treasury issues were subject to the discipline of autonomous market dynamics. Huge open market purchases and reserve requirement manipulations around Treasury refunding dates made it look like the

[99] Martin made repeated references to the "law of supply and demand" in his 1954 speech, comparing it to the "law of gravity" and asserting that whatever you did to try to escape it, it would always catch up with you. Martin Jr., William McChesney, 5, 9, 10.

Federal Reserve was back in the business of supporting yields. To avoid this perception, Fed officials began framing liquidity support as a technical operation that could be conceptually—if not always practically—demarcated from the more politically salient decisions of monetary policy.

The remainder of this chapter is devoted to examining the new techniques that formed the practical complement to this rhetorical shift. During the 1950s, the Federal Reserve increasingly relied on repurchase agreements with government security dealers. These agreements allowed the Fed to support market liquidity without creating the perception that it was attempting to influence prices. At the same time, the Fed also developed an internal policy that it would not change course on its overall monetary policy stance during periods of Treasury refunding. In other words, it would not engage in further tightening or loosening, but instead maintain an "even keel." This informal "even keel" policy was intended primarily to prevent monetary restraint from undermining bond market stability as it had in 1953. Finally, new legislation allowed the Treasury to channel more funds into its accounts at private banks, known as Treasury Tax and Loan (TT&L) accounts. By moving funds between these accounts and its accounts at the Federal Reserve, the Treasury could smooth out fluctuations in reserves and stabilize money market conditions. More directly, increased balances in TT&L accounts gave private banks incentives to underwrite Treasury offerings, effectively insuring those offerings against failure. Taken together, these techniques all kept the government securities market afloat while making liquidity appear more as product of a robust market than the result of

government intervention. This naturalized market liquidity and legitimized interest rates on government securities as an expression of market preferences rather than government policy.

The Rise of Dealer Repo

Repurchase agreements, or repos, were the most significant device for creating this effect.[100] Although repos with security dealers were first used by the Fed toward the end of World War I (and played a modest role in the creation of a liquid market in bankers' acceptances during the 1920s), it was only in the post-World-War II era that repo agreements with government security dealers came to occupy a central role in Federal Reserve operations.[101] This was because repos allowed the Fed to guarantee liquidity in the government securities market without appearing to

[100] A repurchase agreement is form of secured short-term lending. The borrower (or seller) sells a security to a buyer for a short time, often 24 hours or less, then repurchases it at a slightly higher price. The security serves as collateral for the loan and the difference between the sale and repurchase price is effectively the rate of interest on the loan (the "repo rate"). Typically, there is also a "haircut," or margin, imposed on the face value of the bond that would limit the repo seller to, say, 99% of the bond they were borrowing against. The haircut imposed on U.S. Treasury securities (especially bills) is typically small. See Gary B. Gorton and Andrew Metrick, "Haircuts," *Federal Reserve Bank of St. Louis Review* 92, no. 6 (December 2010): 507–19.

[101] The Federal Reserve first employed repurchase agreements as an alternative to discounting operations toward the end of World War I. After the war, however, it quickly found a new use for the contracts: providing liquidity to security dealers. In the 1920s, the Federal Reserve was interested in creating a broad, liquid market for bankers' acceptances. Furnishing liquidity support to dealers who carried these securities seemed the best way to ensure that they would become readily tradeable and rapidly transferrable. Since the Federal Reserve's founding charter was built around the real bills doctrine, however, it made no provision for direct lending to dealers. The Federal Reserve used repurchase agreements—which were legally treated as discrete sales and purchases rather than loans—as a way to get circumvent this restriction. Federal Reserve repurchase agreements never reached a very significant volume in the 1920s and their use fell off shortly thereafter. In the 1930s, money markets were flooded with reserves as the Fed made huge open market purchases, obviating the need for liquidity support. Edward C. Simmons, "Sales of Government Securities to Federal Reserve Banks Under Repurchase Agreements," *The Journal of Finance* 9, no. 1 (1954): 26.

substantively intervene in the market. As one economist put it in a 1954 article on the subject, these agreements were "peculiarly suited to discharge … [the Federal Reserve's] responsibility to the money market and yet avoid the appearance of using their open-market powers to control the prices of government securities."[102]

During the 1950s, repos provided the liquidity guarantee to the government securities market that the peg provided during wartime. They allowed the Fed to transition from a pegged to a "free" government securities market without risking the kind of illiquidity that caused so much anxiety for the financial sector in the immediate postwar era. To understand this point, it is helpful to think of the wartime peg itself as a kind of blanket repo agreement in the government securities market. As long as the Fed kept the Treasury yield curve frozen, dealers and other major financial institutions were assured that any government security they sold could be repurchased on demand in the open market at the same fixed price. When it came to Treasury bills, the Fed even offered a direct repurchase option until 1947. Under its "posted rate" policy, it would buy Treasury bills on demand at 0.375% and give sellers the option (but not the obligation) to repurchase any Treasury bills sold to the Fed on demand at any point prior to maturity.[103]

Once the peg started to give way, repurchase agreements with nonbank government security dealers gradually became a favored channel for providing liquidity support to bond markets. Six months after the Fed's "posted rate" policy on

[102] Simmons, 23.
[103] Simmons, 26–28.

bills came to an end in July 1947, the FOMC Executive Committee authorized each regional Federal Reserve Bank to enter repurchase agreements with U.S. government securities dealers. The explicit goal of the policy was to keep government securities on the balance sheets of private dealers that those dealers "might otherwise sell to the Federal Reserve banks" and to prevent money market banks from creating undue constriction by increasing their lending rates to the government security dealers.[104] In other words, it was a move to make liquidity appear to originate from the private dealers rather than from the Fed.

[104] Executive Committee of the Federal Open Market Committee, "Minutes of the Meeting of the Executive Committee of the Federal Open Market Committee, January 20, 1948," 1948, 9.

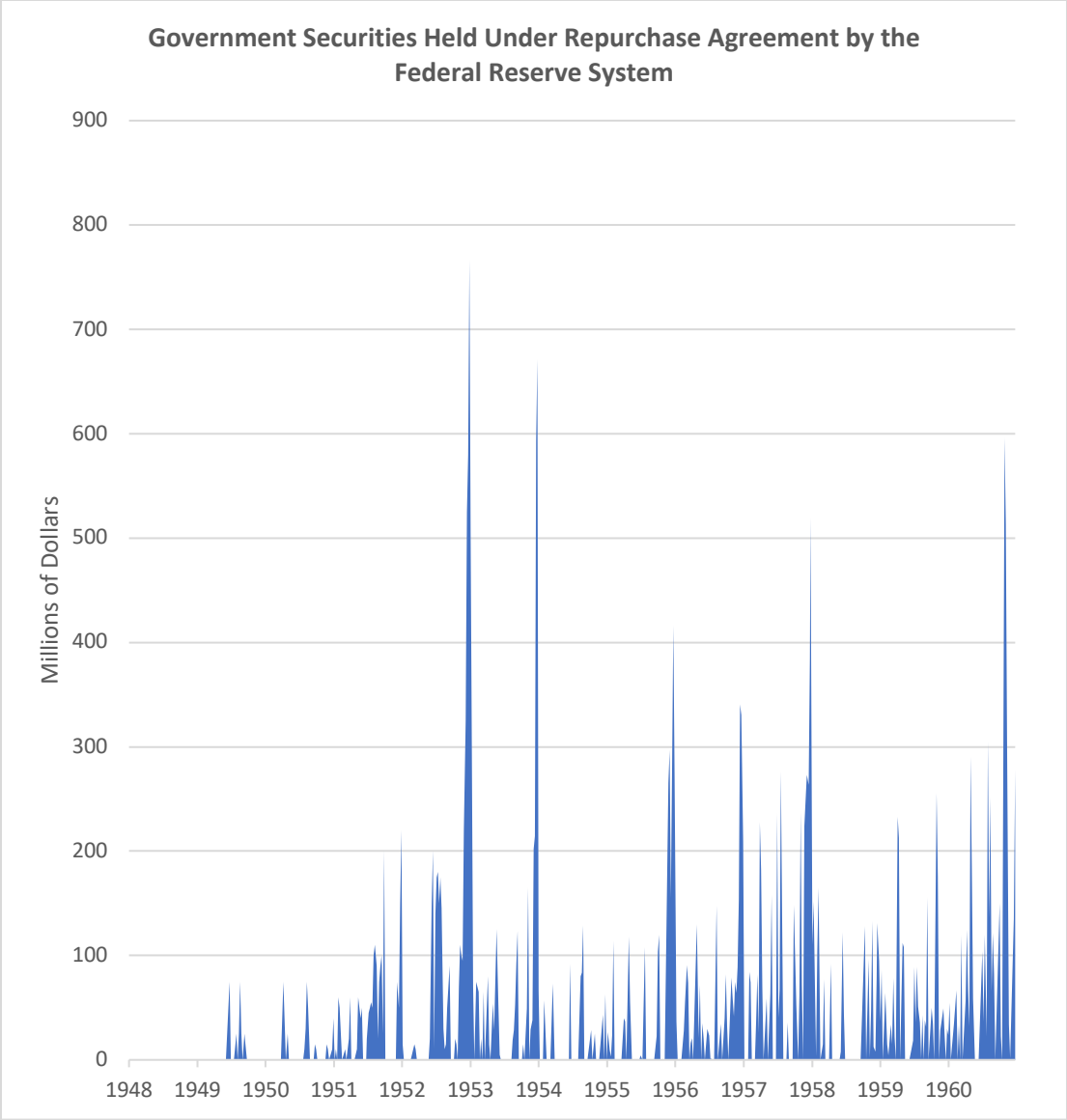

Figure 5: Government Securities Held Under Repurchase Agreement by the Federal Reserve System, 1948-1960

Sources: data for 1948-53 compiled by Edward C. Simmons, "Sales of Government Securities to Federal Reserve Banks Under Repurchase Agreements," The Journal of Finance 9, no. 1 (1954). Data beginning the week of April 15, 1953 is reported by the Federal Reserve Board of Governors, compiled in Cecila Bao et al., "The Federal Reserve System's Weekly Balance Sheet Since 1914," Studies in Applied Economics (John Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise & Center for Financial Stability, July 2018), https://sites.krieger.jhu.edu/iae/files/2018/07/Federal-Reserve-Systems-Weekly-Balance-Sheet-Since-1914.pdf.

Initially the FOMC specified that repurchase agreements could be "used only in periods of strain, with care and discrimination, as a means of last resort."[105] But these constraints were progressively eliminated over the years. By March 1950 (as the FOMC was ramping up its pressure on the Treasury to end the peg), the phrase "as a means of last resort" was replaced with an authorization to use repo "as a means of providing the money market with sufficient Federal Reserve funds as to avoid undue strain on a day-to-day basis." Here again, Federal Reserve staff argued that enlarging repurchase operations would "enable dealers to absorb as much of the buying and selling in the market as possible and to carry the necessary inventory of securities to provide a market, leaving the System as only a residual buyer."[106]

As figure 5 shows, the volume of repurchase agreements remained modest until the Accord. But as the peg came to an end and the government securities market became "free," the need for liquidity support to government securities dealers became more urgent. Indeed, one of the key recommendations of Martin's 1952 ad hoc subcommittee (which formulated his "free market" program) was that the New York Fed should make repurchase facilities for nonbank dealers more readily available.

The subcommittee's final report noted was deeply concerned with dealer liquidity. One of the major institutional obstacles that it sought to overcome was the fact that nonbank dealers were not members of the Federal Reserve System, which

[105] Executive Committee of the Federal Open Market Committee, 10. For a comprehensive historical overview of the FOMC's policy changes regarding repurchase operations, see Garbade, *After the Accord*, chap. 11.
[106] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, March 1, 1950," 1950, 7–8.

meant that they did not have access to discount window or the federal funds market. This forced nonbank dealers to borrow at much higher money market rates than banks during times of monetary stringency. As a result, it often became prohibitively expensive for them to maintain their portfolios when the Fed was attempting to put pressure on money markets. As pressure increased, these dealers were forced to start liquidating and could no longer make the market. Tight monetary policy would thus tend to undermine the liquidity of the government securities market. Nonbank dealers repeatedly stressed this point in their meetings with Martin and the ad hoc subcommittee in 1952 and argued that a standing repo facility would provide a much-needed safety valve that would prevent money market stringency from boiling over into disorderly market conditions.[107] The subcommittee agreed. It proposed to the FOMC in March 1953 that "facilities at an appropriate rate and with appropriate limitation as to volume be made regularly available to nonbank dealers."[108]

The irony of this proposal was not lost on the FOMC. The ad hoc subcommittee's core argument for the bills only policy was, after all, that restricting Federal Reserve intervention in the market would give private dealers the space they needed to flourish. The subcommittee argued that the "natural strength and resilience" of the dealer market was "greatly inhibited by official 'mothering.'"[109] And yet, here

[107] United States Monetary Policy: Recent Thinking and Experience, 274–75.
[108] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, March 4-5, 1953," 48.
[109] United States Monetary Policy: Recent Thinking and Experience, 266. The desire to safeguard American masculinity from excessive mothering was a recurrent theme of the postwar era. For example, the psychiatrist Edward Strecker's widely read book *Their Mothers' Sons* argued that too much mothering left American men psychologically "enwombed" and increasingly ill-prepared for the discipline and rigors of military life. See Edward Adam Strecker, *Their Mothers' Sons: The*

the subcommittee was proposing that dealers should be granted liquidity support from the Fed at their own initiative. In the March 1953 FOMC meeting dedicated to discussing the ad hoc subcommittee's findings, account manager Robert Rouse objected to making repo more accessible to dealers. He thought a standing repo facility "would be putting the Committee right back in the business of pegging Government securities." Allan Sproul agreed. If the entire point of abandoning the peg was getting the Federal Reserve out of the position where it would have to monetize privately held government securities on demand, what sense did it make to put itself right back in that position by offering a standing repo facility to dealers?[110] Surely, Sproul maintained, such an idea could not be reconciled with the subcommittee's professed loyalty to free market principles.[111]

Sproul and his colleagues at the FRBNY were more than willing to pounce on Martin's subcommittee for attempting to limit the discretion of the account manager (who himself operated out of the New York Fed) in the name of "free markets." But they were not opposed to the use of repurchase agreements to support dealer liquidity

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Psychiatrist Examines an American Problem (Lippincott, 1946); quoted in K. A. Cuordileone, "'Politics in an Age of Anxiety': Cold War Political Culture and the Crisis in American Masculinity, 1949-1960," *The Journal of American History* 87, no. 2 (2000): 527–28.

[110] Sproul remarked that "It was a question of whether the System put credit policy ahead of improving the Government securities market. He felt credit policy should be put first, that this was the reason the System had gotten out from under the peg and away from the position of making reserve funds available to banks at their initiative, rather than at the initiative of the Federal Reserve." Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, March 4-5, 1953," 48.

[111] Sproul commissioned an FRBNY study of the government securities market as a response to the report of the ad hoc subcommittee. The FRBNY report argued that "extension of [standing] repurchase facilities to dealers constitutes, in effect, indirect intervention in the market and so tends to conflict with the objective of promoting as free a market as possible." The Ad Hoc Subcommittee, the FRBNY charged, were simply deferring to dealers' every whim. Dealers wanted to be in a position of "shooting fish in a bucket," the report stated, "but there is no obvious reason why the System should cater to that desire." United States Monetary Policy: Recent Thinking and Experience, 313.

as such. Rather, their overall goal was to give the account manager as much leeway as possible in their market interventions. Toward this end, they were happy to use dealer repo so long as it was at the account manager's initiative, and not the initiative of dealers.

In fact, account manager Robert Rouse's discretionary use of repurchase agreements dramatically increased during the 1953-54 recession. Toward the end of 1953, Federal Reserve official forecasted a substantial liquidity drain related to seasonal cash needs. To offset this drain, Rouse made enormous, unprecedented repurchase commitments with government security dealers, adding between $120 and $735 million in reserves per day between December 9, 1953 and January 13, 1954.[112] Although the account manager was under instructions to pursue "active ease" at the time (due to the recession) FOMC members believed that it was nonetheless best to limit outright open market purchases.[113] Allan Sproul was particularly vocal on this point. If the goal of intervening was to quell the temporary disturbance to the money market and avoid disorder, he argued, it would be a mistake to engage in a "more permanent commitment" by reducing discount rates or making outright purchases. Use of repurchase agreements would allow banks to "make their necessary adjustments in large part through the Government security market" without permanently expanding the money supply or signalling further easing to markets. It

[112] Garbade, *After the Accord*, 160.
[113] The FOMC directive to the Executive Committee stated that EC instructions to the account manager should be formulated with a view to "promoting growth and stability in the economy by actively maintaining a condition of ease in the money market." Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, December 15, 1953," 1953, 32.

would make it appear, in other words, that the government security market itself—and not the Fed—provided the necessary liquidity buffer for banks. Because dealer repo allowed the Fed to provide liquidity support without making any apparent changes to its policy positions or the longer-term trajectory of the money supply, such operations "emphasized the money market aspect of the situation as distinguished from the overall business and credit aspect."[114] Where open market operations were meant to be based in the Fed's evaluation of economic fundamentals, liquidity support was framed as a narrowly technical intervention in money markets.

Cleaning up "Sloppy" Markets: Dealer Repo in the 1953-54 Recession

Sproul's argument for minimizing outright purchases (even in a recession) was well aligned with the interests of the financial sector. Since recessions diminish expectations for profitable private investment and thereby dampen credit demand, downturns lead banks, insurance companies and other institutional investors to buy Treasury securities. The recession of 1953-54 was typical in this respect.[115] As financial firms shifted their portfolios into liquid and risk-free but low-yielding government debt, they became increasingly concerned that the supply of Treasury securities available for purchase in the secondary market would remain adequate and that yields would not get too low. As noted in the previous chapter, financial firms want to have their cake and eat it too. They want liquid, risk-free stores of value that

[114] Federal Open Market Committee, 27.
[115] The ratio of loans to government securities held by commercial banks declined from a peak of 112% May 1953 to 97% in October 1954. See Figure 1, above.

allow them to reduce exposure to the economic downturn. But they do not want interest rates to fall too low. Use of dealer repo allowed the Fed to accommodate this demand. It reduced volatility and kept markets liquid but without depressing interest rates unduly.

The Federal Advisory Council's behavior during the recession demonstrates this point. Bankers on the FAC persistently badgered Fed officials to sell off Treasury bills rather than making purchases during the downturn. More bills on the market, they argued, would allow them to fill the hole in their portfolios left by the decline in private loans. Conversely, expanding bank reserves with outright purchases made money markets "sloppy" and threatened to make yields "disorderly on the downward side."[116] Bankers did not think that repurchase operations presented the same danger, however. FAC President Edward E. Brown expressed approval of the Federal Reserve's operations in December 1953—which were largely confined to repurchase agreements—but complained that the resumption of outright purchases later in January drove the bill rate below 1% and made "money unduly and artificially cheap."[117]

Insurance companies weighed in as well. Carroll Shanks, of the Life Insurance Association of America, privately lobbied Martin to hold back on monetary easing,

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[116] "Minutes of Meeting of the Federal Advisory Council, November 15-17, 1953," 1953, 29, https://fraser.stlouisfed.org/files/docs/historical/nara/fac_minutes/fac_19531115.pdf; "Minutes of Meeting of the Federal Advisory Council, February 14-16, 1954," 1954, 12, https://fraser.stlouisfed.org/files/docs/historical/nara/fac_minutes/fac_19540214.pdf; see also Edwin Dickens, "Bank Influence and the Failure of US Monetary Policy during the 1953–54 Recession," *International Review of Applied Economics* 12, no. 2 (1998): 221–40.
[117] "Minutes of Meeting of the Federal Advisory Council, February 14-16, 1954," 7.

pointing to "thinness of supply" in the bond market and rapidly declining yields. While Shanks conceded the importance of flexible interest rates and the necessity of some easing in a recession, he told Martin that "we think it is a mistake for credit policy to encourage *abrupt* changes in interest rates and also *wide swings*." Moderate easing in a business downturn was well and good, but the Fed had "gone much too fast," and had dealt a harsh blow to insurance industry profitability.[118]

Government security dealers, for their part, argued publicly that dealer repo was the only solution to the financial sector's woes. A repo facility at the Fed could ensure liquidity and money market stability without unduly affecting the prices of government securities. In May 1954, bond dealer Aubrey Lanston gave a speech to a group of Indiana bankers making the case for a standing repurchase facility for nonbank government security dealers at the Fed. Such a facility, Lanston maintained, would allow the Fed to put liquidity directly into the market without being "haunt[ed]" by rising market prices and declining yields, as it had been during recent months. It would also allow the Fed to prevent bond market disorder during a period of monetary stringency without giving up on an overall policy of credit restraint.[119]

In the end, the FOMC never agreed to institute the kind of standing repurchase facility that both Lanston and Martin's ad hoc subcommittee recommended. Objections from Rouse, Sproul and others at the FRBNY that this would constitute a return to the peg proved convincing to the majority of the committee. Nevertheless,

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[118] Carroll M. Shanks, "Letter, Shanks to William McC. Martin," March 1, 1954, Papers of Allan Sproul, https://fraser.stlouisfed.org/files/docs/historical/sproul/shalet54.pdf. Emphasis in the original.
[119] Paul Heffernan, "Bond Dealer Puts Plan to Reserve," *New York Times*, May 17, 1954, sec. Business Financial.

the argument that discretionary repo was the best way to provide liquidity without appearing to influence prices was equally persuasive. As the recession came to an end, this rapidly became the consensus position on the FOMC.

The Fed, in Absentia: Instituting the "Even Keel" Policy

Economic recovery in late 1954 and early 1955 once again raised the problem of reconciling monetary restraint with the need to maintain order and confidence in the government securities market. By September 1954, the recovery was apparent, and the Fed began reversing course on easing shortly thereafter.[120] In its January 1955 meeting, the FOMC adopted a target of zero free reserves—the most significant attempt to impose monetary restraint of the postwar period. Banks sold off bills in response, pushing yields upward.[121] Longer term governments subsequently fell and corporate bond markets became increasingly volatile. The *Los Angeles Times* reported that "erratic" market conditions were a result of anxiety among investors about the prospect of tight monetary policy, combined with rumors of an impending long-term Treasury issue.[122] Investors were worried, in other words, about a repeat of

[120] "[A]s business expansion began to gather momentum, open market purchases were moderated and bank reserve positions were subject to some tightening from pressures resulting from year-end and other credit demands. Board of Governors of the Federal Reserve System, "Forty-First Annual Report of the Federal Reserve Board Covering Operations for the Year 1954," 1955, 7.
[121] Edwin Dickens, "U.S. Monetary Policy In The 1950s: A Radical Political Economic Approach," *Review of Radical Political Economics* 27, no. 4 (December 1, 1995): 89. "Free reserves," defined as excess reserves net of discount window borrowing, was both the Federal Reserve's central quantitative policy target in the post-Accord era and a key indicator of money market conditions. The target was adopted in 1954. See Garbade, *After the Accord*, chap. 10.
[122] Associated Press, "Prospect of Tighter Credit Controls Hits Bond Market," *Los Angeles Times*, January 9, 1955.

the 1953 financial panic, when the new 30-year Treasury bond issue was allowed to crowd out private investment and sharply tighten market conditions.

It turned out that the rumors about the bond issue were true. Treasury soon announced an offer to exchange maturing certificates, notes and bonds for a new 40-year bond, a 2 ½ year note and a 13-month note.[123] This was an exchange offering, not an issue for new cash. So, in theory, it would not pose the same complications in money markets as the 30-year bonds of 1953. Even so, Martin was determined to avoid upsetting markets this time around. When he discussed the Treasury's proposal for a 40-year bond in the January FOMC meeting, he was noticeably uneasy. Although he had "never … seen a solider, stronger securities market," Martin mentioned that the Treasury's financing presented a "particularly difficult problem." Money market stringency had nearly sunk the last long-term issue. With this issue, he wanted the account manager to be clear that the Fed's actions should be "constructive" to the Treasury refinancing effort. "We certainly don't want a weak market while they are doing their financing," he said.[124]

As money market pressure escalated, other Fed officials raised concerns. In the January 25 Executive Committee meeting, Governor A.L. Mills fretted about bank liquidity drying up: "the System had been so drastic in its policy and rates had moved up so fast that the commercial banking system was suffering from a lack of

[123] This was the longest-dated bond issue since the Federal Government financed the Panama Canal with 50-year bonds in 1911. Garbade, *After the Accord*, 187; "A 40-Year Bond," *New York Times*, February 1, 1955.
[124] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, January 11, 1955," 1955, 8. Portions of the following passages from FOMC and Executive Committee meetings are quoted in Garbade, *After the Accord*, chaps. 12–13.

liquidity." Increasing yields on Treasury bills tended to drain deposits from the commercial banks as corporate investors substituted bills for deposits, Mills warned. Allowed to go unchecked, this dynamic could jeopardize the Treasury refinancing effort. While Martin did not want to back off from the overall policy of monetary restraint, as Mills suggested, he recognized that diminishing bank liquidity could pose a problem for the Treasury's exchange issue and potentially lead to disorder. He asked account manager Rouse what he could do to "to provide a minimum disturbance to the market … so that whatever the decision of the Treasury with respect to the financing, its offering would not be influenced by actions taken by the Federal Reserve." Martin explained later in the meeting that he was aiming at an "even keel"—a policy that would make monetary policy as inconspicuous as possible during a period of Treasury financing: "The Treasury's offering should not appear either to be floated by the Federal Reserve or hindered by the Federal Reserve. In other words, the Federal Reserve should be 'in absentia' as far as possible."[125]

Rouse answered Martin's request for an "even keel" by suggesting that he could be "reasonably free with repurchase facilities in order to assist dealers in fulfilling their function during the Treasury financing." Martin assented, responding to Rouse that "whatever the course the account had been pursuing in the market lately, at the moment it should serve as a stabilizing influence."[126] As soon as the Treasury offering was officially announced, Rouse followed through. He immediately

[125] 8/24/21 3:00:00 PM
[126] Executive Committee of the Federal Open Market Committee, "Minutes of the Meeting of the Executive Committee of the Federal Open Market Committee, January 25, 1955," 1955, 10.

began contacting the major government security dealers to inform them that the FRBNY would enter into repo agreements with dealers on "rights" on the maturing securities for which the Treasury was offering an exchange.[127] Effectively, Rouse offered open-ended liquidity support for dealers on the relevant Treasury issues, allowing them to carry positions in these securities until the exchange offer was settled.

This raised some eyebrows at the next meeting of the FOMC executive committee. Governor J.L. Robertson (who had in the past questioned the legality of the Federal Reserve engaging in dealer repo in the first place)[128] pointed out that the bills only policy explicitly barred the account manager from purchasing any maturing issues for which an exchange was being offered. It also required that purchases remain confined to short-term securities except in the correction of disorderly markets. In light of these stipulations, Robertson accused Rouse of violating the bills only policy. Wasn't he using repos for a kind of backchannel support of the government securities market? Wasn't the System Open Market Account providing exactly the kind of direct support for Treasury issues that the bills only policy was meant to prevent? Robertson was dubious that there was "any real difference between

[127] Garbade, *After the Accord*, 187. A "right" is the option held by an investor to roll over their maturing government security into a new security issued by the Treasury in an exchange offering.
[128] For Robertson's argument against the legality of the Federal Reserve entering into repurchase agreements, see Executive Committee of the Federal Open Market Committee, "Minutes of the Meeting of the Executive Committee of the Federal Open Market Committee, October 20, 1954," 1954, 3.

purchasing maturing issues during a period of Treasury financing and executing repurchase agreements covering such securities."[129]

Rouse shot back that there was a "substantial difference." With repo agreements there was "no thought of influencing any phase of the market except to facilitate dealer operations." The remainder of the FOMC Executive Committee seemed to agree with Rouse. Governor Szymczak added that where outright purchases were substantive interventions that "influence market prices," repurchase agreements "entail no price support." Governor Vardaman went further, expressing disbelief that Robertson would be so obtuse as to suggest that the repo operations violated the bills only policy. That policy, he affirmed, was instituted to avoid "action that might be taken to influence price." And Vardaman "did not see how repurchase agreements could be construed as being for the purpose of supporting any pattern of prices."[130]

This analytical distinction between liquidity support for dealers and price support for securities seemed credible to the rest of the FOMC. At its next full meeting on March 2nd, the FOMC formally revised the bills only policy to allow the liberal use of repurchase agreements on government securities of *all* Treasury issues. The amended policy read: "Operations for the System account in the open market, *other than repurchase agreements*, shall be confined to short-term securities (except in the correction of disorderly markets)." The Board of Governors' 1955 *Annual*

[129] Executive Committee of the Federal Open Market Committee, "Minutes of the Meeting of the Executive Committee of the Federal Open Market Committee, February 8, 1955," 1955, 3–4.
[130] Executive Committee of the Federal Open Market Committee, 4–5.

Report explained that this insertion was meant to "make clear that the Committee did not intend to preclude repurchase agreements with nonbank dealers in Government securities covering Treasury securities that might have a maturity outside the short-term category, or that might be involved in a Treasury financing."[131]

In July 1955, the FOMC relaxed rules on repo arrangements even further, eliminating the requirement that repo should be used "with care and discrimination." The new guideline specified only that repos would be used "as a means of providing the money market with sufficient Federal Reserve funds as to avoid undue strain on a day-to-day basis." As President of the Richmond Fed, Hugh Leach, explained in the July meeting, such day-to-day use of repurchase agreements was "useful … in keeping the Federal Reserve from having to make frequent outright purchases and sales of securities." This helped prevent investors from being "confuse[d] … as to what the Committee was trying to attain" and prevent the Fed's credit policy from having "an effect upon the securities market itself."[132]

The distinction between repurchase operations and open market purchases helped, in other words, to shore up the discursive barrier between liquidity support and monetary policy. Liquidity support—correcting "undue strain" and keeping money markets on an "even keel"—was framed passive and defensive. Monetary policy—guiding the economy through adding or subtracting aggregate reserves—was active and offensive. And even as repurchase operations with government security

[131] Board of Governors of the Federal Reserve System, "Forty-Second Annual Report of the Federal Reserve Board Covering Operations for the Year 1955," 1956, 93–94.
[132] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, July 12, 1955," 1955, 19–20.

dealers were authorized on a "day-to-day basis," they retained the flavor of the exception, rather than the rule. In this sense, repurchase operations helped to naturalize market liquidity. Liquidity appeared to emerge from private dealers while the Fed remained "in absentia." This naturalization of money market liquidity—and the erasure of active support for orderly markets—made the success or failure of Treasury issues seem as if it were determined by "the market." After the Treasury's $15 billion refunding effort succeeded in February 1955, for example, Treasury Secretary Humphrey effusively thanked "the banks, the Government security dealers and the entire financial community" for their support in the refunding effort.[133] Notably, he declined to thank the Fed.

"Dynamic" Open Market Operations, "Defensive" Repo

The significance of dealer repo as a low-profile substitute for open-market purchases was hammered home toward the end of 1955, when the Federal Reserve bailed out a Treasury exchange issue by directly purchasing certificates.[134] The financial press quickly pounced on the move, declaring it the first direct support for a U.S. Treasury issue since the bills only policy was adopted in 1955.[135] This kind of reporting made it clear that the financial press did not consider supporting a Treasury

[133] "Secretary Humphrey Calls New U.S. Long-Term Refunding 'Success,'" *The Christian Science Monitor*, February 9, 1955, sec. Financial.
[134] Treasury Certificates of Indebtedness were coupon-bearing securities that typically had a slightly longer maturity than bills, up to one year.
[135] "Federal Reserve Adds $167 Million Treasury Certificates to Holdings," *Wall Street Journal*, December 16, 1955; "Reserve's Buying Propped U.S. Issue," *New York Times*, December 16, 1955, sec. Business Financial.

issue by liberally granting repo credit to government security dealers to be a form of "direct support." Senator Paul Douglas publicly reprimanded the Federal Reserve as well, complaining that it had failed to let the market "find its own level." Comparing Fed officials to Rip Van Winkle—who couldn't see the harm in having "just one' drink before falling into an inebriated slumber—Douglas grumbled that "The Federal Reserve seems to find it hard to maintain a life of virtue."[136] Such public humiliation was a world apart from the muted reception to the Fed's use of repurchase operations in the February 1955 exchange offering.

Martin was flummoxed by the whole situation. The Fed, he thought, was stuck between a rock and a hard place. Supporting the issue made it appear that the Fed had "panicked" into abandoning its principles. But refusing to support it would have opened the Fed to charges of being rigid and "doctrinaire." After all, Martin thought that the Treasury issue had been "priced correctly." The only reason that it was in trouble in the first place was that a recent hike in the discount rate had left investors "confused as to the state of the market."[137] Martin was more than willing to depart from the principled abstention of bills only, as long as he believed that the Treasury was *attempting* to price its issues to "the market." (This was true even if "market psychology" was sometimes wrong about what the "correct" price was.) But the criticisms of weak leadership and spinelessness that came with conspicuously bailing out a Treasury issue stung.

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[136] Robert Young, "Douglas Raps Federal Reserve Policy," *Chicago Daily Tribune*, December 18, 1955.
[137] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, December 13, 1955," 1955, 23–25.

If the FOMC drew one lesson from the two Treasury bailouts of 1955, it was that dealer repo provided a far more politically defensible way of supporting the government securities market than outright purchases of new Treasury issues. Repo consequently became one of the Fed's primary policy instruments in 1956 and 1957. The FRBNY's 1956 Annual Report of Open Market Operations noted that larger outright transactions had mostly gone by the wayside, replaced by a "heavy reliance on the repurchase agreement mechanism."[138] The 1957 report went further, observing that repurchase agreements had become the core mechanism for preventing bond market disorder during a period of monetary restraint:

> In maintaining the degree of restraint desired by the Committee from April to October the Account Management faced the problem of achieving maximum effective tightness short of a point where orderly functioning of the money and securities markets would be impeded. Repurchase agreements were an ideal tool for the accomplishment of this objective, since they could be used to inject reserves, many times merely on an overnight basis, at the precise point where the market machinery was grating.[139]

The language of "machinery" in this passage is not incidental. What legitimated repurchase operations—as opposed to direct price support for government securities—is that repo could be portrayed as a technical, rather than a political, operation. This is what made repos preferable to more conspicuous open market purchases. Repo was framed as putting oil in the gears of an otherwise self-propelled market machine. It did not make the market but allowed the private dealer market to

[138] Federal Reserve Bank of New York, "1956 Annual Report of Open Market Operations," 1957, 2; quoted in Garbade, *After the Accord*, 209.
[139] Federal Reserve Bank of New York, "1957 Annual Report of Open Market Operations," 1958, 4; quoted in Garbade, *After the Accord*, 210.

make itself. This kind of technical market intervention, designed to maintain an "even keel," could be conceptually distinguished from policy-driven interventions designed to tighten or loosen market conditions. This, in turn, allowed the Fed to distinguish liquidity support for the Treasury market from the subordination of monetary policy to the needs of Treasury finance.

Robert Roosa, Vice President of the research department at the New York Fed, provided a systematic treatment of this distinction in his 1956 monograph on Federal Reserve operations in the government securities market. One could not understand the Fed's role in the money markets, Roosa contended, without first understanding the difference between "dynamic" and "defensive" operations. "Defensive" operations aimed at "avoiding mechanical disturbances that could interfere with the smooth functioning of the monetary system." "Dynamic" operations (what we would call monetary policy today) aimed at macroeconomic management by altering the level of bank reserves and the relative tightness of the money market. Repos fit under the rubric of defensive policy. They were meant to offset transient disturbances in the money supply, or to ease "excessive pressure [that] was only the result of a temporary knot in the money market which could not at the moment be untangled."[140]

Of all the "mechanical disturbances" that Roosa considered in his book, Treasury borrowing was the most significant:

[140] Roosa, Robert V., *Federal Reserve Operations in the Money and Government Securities Markets* (New York: Federal Reserve Bank of New York, 1956), 85, 104–5.

> Because of the massive size of virtually all Treasury debt operations, they are inescapably a temporary distorting influence upon the usual day-by-day procedures of the Government securities market, and they frequently have temporary money market repercussions that would, if unchecked, create conditions out of line with the prevailing aims of general credit policy.

Repurchase agreements with dealers helped to "smooth over the impact on the market of a gigantic borrowing operation" and prevent the "indigestion that is almost chronic with some types of large issues from becoming a serious disorder." Repos also gave dealers the support they needed to underwrite new Treasury issues—to "make the broad markets … that are often essential to the successful initial flotation of any large issue." Equally important was the fact that they were inconspicuous. Where outright purchases of Treasury bills had "great psychological influence" and were prone to causing "disturbance or an unsettling misunderstanding in the market," repurchase operations did not rock the boat.[141]

Indeed, one of the main purposes of Roosa's book was to inoculate investors against this kind of "misunderstanding" by clarifying the relationship between defensive and dynamic operations. The problem, Roosa pointed out, was that there was all too much focus in contemporary markets on dynamic monetary policy. This was a relatively new phenomenon. In its early years, the Federal Reserve focused exclusively on defensive operations. In order to maintain an "elastic currency" the Fed sought to offset any seasonal, regional, or otherwise contingent monetary imbalances that might cause temporary tightness in the money markets—or worse,

[141] Roosa, Robert V., 85–86.

financial crisis. Since the emergence of open market operations in the 1930s, however, dynamic operations had increasingly taken center stage. By the 1950s, awareness of the Federal Reserve's role in steering the macroeconomy had become so pervasive that the public often rushed to "identify specific changes in System holdings of Government securities, from week to week, with the more dramatic aspects of general credit policy."[142]

This was the main problem with "market psychology" that Roosa hoped to correct. Although open market operations were often identified with macroeconomic stabilization, they were equally important in effecting defensive policy. By educating professional investors about the continued relevance of defensive policy, Roosa would foster a market less prone to mistaking temporary, defensive stabilization of the money supply for a change in dynamic policy directives. Financial journalists were enlisted to help in this pursuit. *New York Times* columnist Albert L. Kraus, for example, used Roosa's concepts to explain that that an addition of nearly $500 million worth of government securities to the Federal Reserve's balance sheet in mid-1957 did not indicate any shift away from the policy of monetary restraint. The additions were made through repurchase agreements with dealers, Kraus pointed out, amounted to defensive measures, not dynamic policy change.[143]

The effect of categorizing liquidity support for the government securities market as defensive policy was to erase its constitutive function in the government

[142] Roosa, Robert V., 8–10, 100.
[143] Albert L. Kraus, "Federal Reserve Sharpens a Tool," *New York Times*, July 14, 1957, sec. Business and Finance.

security market. Government securities are valued because they are a safe, liquid store of value, with a secondary market that remains relatively stable regardless of the overall economic situation. To borrow a term from financial economist Gary Gorton, Treasuries are "information insensitive."[144] A financial institution can invest in Treasuries and be relatively confident they will retain their value and liquidity—whatever happens. What makes them information insensitive in this sense is precisely the Fed's efforts to smooth the market, to inoculate it against any liquidity shocks that Treasury borrowing might otherwise produce. The discourse of defensive policy obscures this fact. Defensive policy is defined as nonintervention, as maintaining the status quo in money markets—or at least the status quo that would counterfactually exist in the absence of "mechanical failures" in market infrastructure. This is true despite the fact that heading off mechanical failures requires constant action. "[E]very day," Roosa explains, "there are actual, or incipient, or threatened problems of mechanics that must be watched, and where necessary resolved." Paradoxically, this understanding of defensive policy leads Roosa to characterize the threat of illiquidity posed by Treasury borrowing as an externality—a "distorting influence"—in the market for Treasury debt itself. This is much like arguing that the demand for mortgage credit is a distorting influence in the mortgage market. However tortuous the logic of such a claim, it was effective in training investors to disregard liquidity support as a significant intervention into the market. It helped to make the "even

[144] Gary Gorton, "The History and Economics of Safe Assets," *Annual Review of Economics* 9, no. 1 (2017): 547–86.

keel" that the Fed actively shaped into an unmarked norm, while illiquidity appeared as a deviation.[145]

In reality, it took quite a bit of intervention for the Fed to maintain an even keel. Even as Martin argued that "even keel" policy meant that the Fed should be "in absentia" in the money market, he pushed back on the account manager whenever it seemed there was even a remote possibility that a Treasury issue would fail. For example, after a Treasury offering suffered unusually high attrition in May 1955, Martin pressured the manager to "keep the keel a little more even" and ensure that this was not repeated in the months that followed. He pointed out that he was not intending to criticize the account manager, however, because he recognized that "an even keel was a difficult objective to attain during a Treasury financing."[146] To Fed officials at least, it was clear that attempting to subtract the impact of Treasury operations from the money market was not a simple, "mechanical" task.

Treasury Tax and Loan (TT&L) Accounts

Dealer repo was not the only method for insulating the government securities market from monetary stringency. During the 1950s, Treasury cash management techniques (coordinated with the Federal Reserve) also played an integral role in stabilizing the government securities market and maintaining market liquidity. The

[145] Roosa, Robert V., *Federal Reserve Operations in the Money and Government Securities Markets*, 64, 74.
[146] Executive Committee of the Federal Open Market Committee, "Minutes of the Meeting of the Executive Committee of the Federal Open Market Committee, May 24, 1955," 1955, 6, 17.

practice of using cash management tools to prop up the market for government debt was initially used as a wartime expediency. As outlined in Chapter 3, during World War I and World War II, qualifying private banks ("special depositaries") were legally permitted to purchase Treasury debt by simply crediting accounts that the Treasury would open at the very same bank (known as "war loan accounts"). The effect of this arrangement was to allow banks to "purchase" Treasuries with their own deposit liabilities—their own IOUs.

Figure 6, below, charts the astronomic rise of balances in war loan accounts during the Second World War. During the war, war loan accounts were exempt from both reserve requirements and FDIC assessments, which effectively removed any meaningful constraints on allowing private banks to print their own money for the purpose of purchasing Treasury debt. In 1947 these exemptions were slated to expire. It appeared that war loan deposit accounts might once again fall into relative disuse, as they had after the First World War.

Beginning in March 1948, however, Congress authorized a series of new measures that directed more and more cash receipts into these accounts, ensuring that the accounts would remain a part of the peacetime monetary system. Treasury was authorized for the first time to direct receipts of withheld income taxes into its accounts at private banks, rather than its account at the Federal Reserve. By 1950, social security payroll taxes were added to the program. Signalling the new peacetime role these accounts had to play, they were renamed from war loan accounts to Treasury Tax and Loan (TT&L) accounts. Several other tax revenue streams were

added in the years that followed.[147] All these new inflows provide substantial support to the government securities market.

[147] These included taxes collected under the Railroad Retirement Act of 1951 and numerous excise taxes. “Tax and Loan Accounts,” 8.

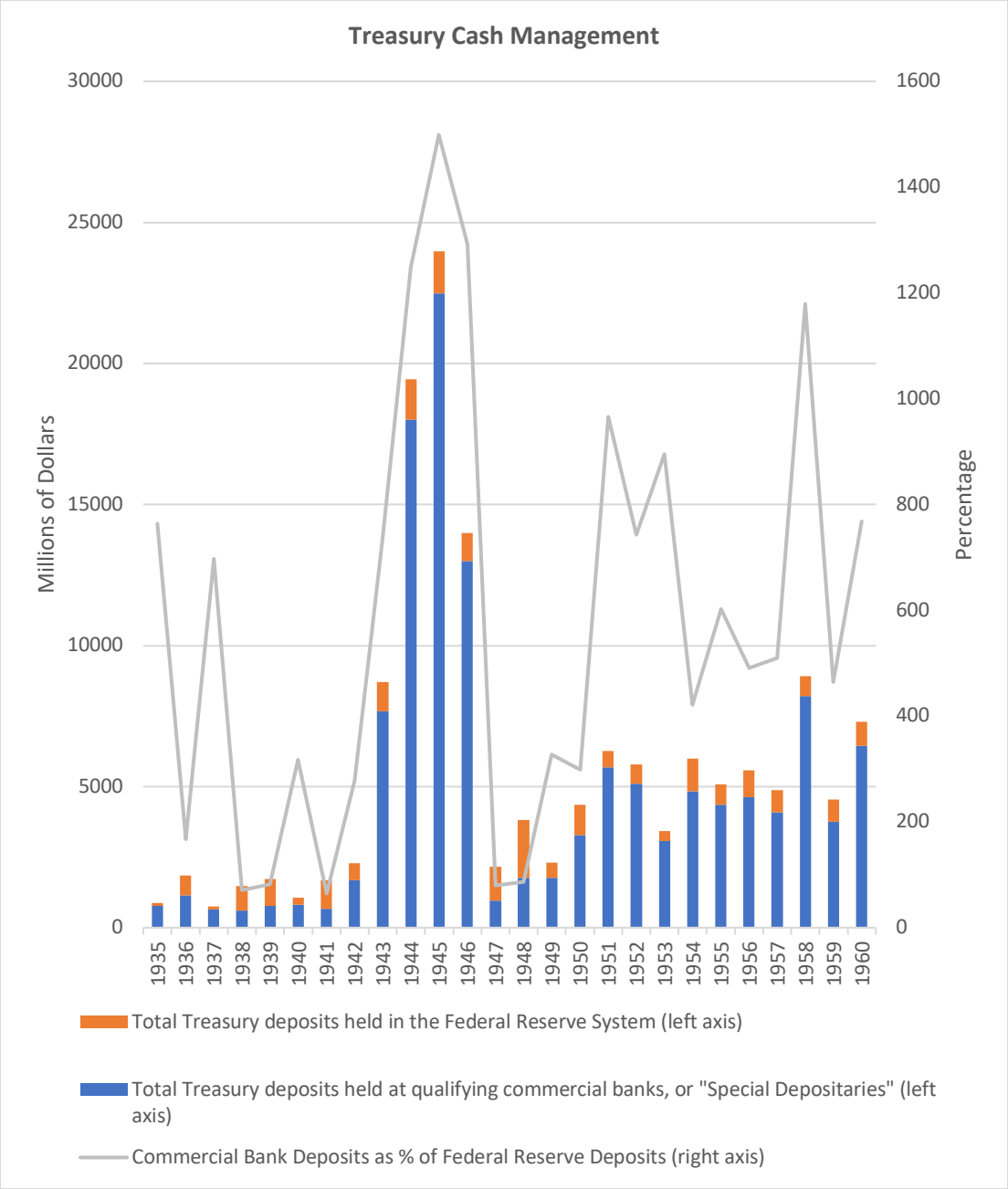

Figure 6: Treasury Cash Management, 1935-1960

Source: Annual Report of the Secretary of the Treasury on the State of the Finances, 1935-1960. Deposit balances displayed are levels recorded at end of each fiscal year.

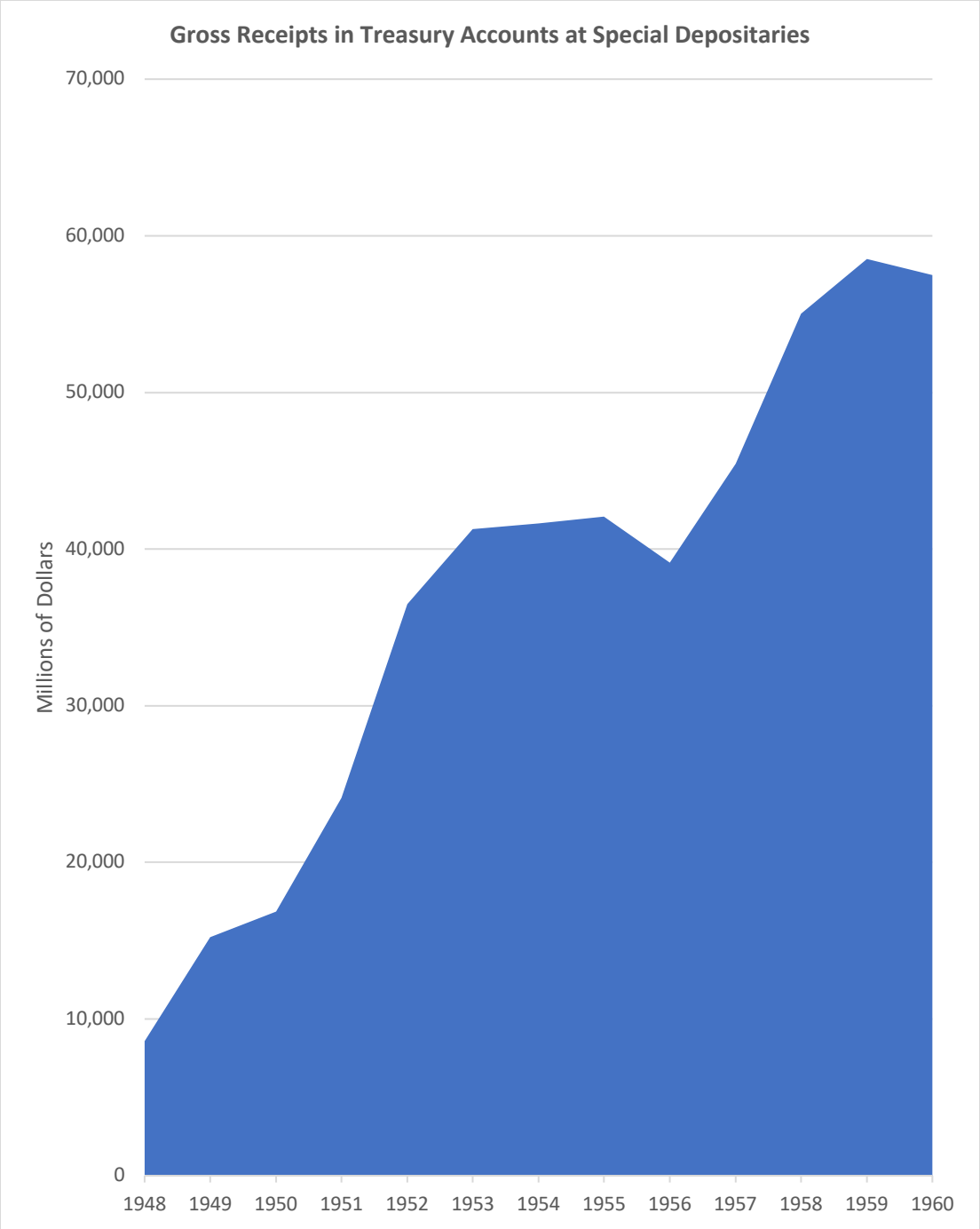

Figure 7: Gross Receipts in Treasury Accounts at Special Depositaries, 1948-1960

Source: Annual Reports of the Secretary of the Treasury on the State of the Finances, 1955 & 1960

In a 1960 study of tax and loan accounts, the U.S. Treasury department concluded that allowing commercial banks to subscribe to Treasury offerings with TT&L account credits (allowing private banks to "pay" for Treasury offerings by simply issuing new deposit liabilities in Treasury's account at the bank) significantly lowered the price that the Treasury had to pay in interest. Along similar lines, it argued that the debt underwriting that commercial banks provided through TT&L gave an incalculable advantage to the Treasury. "The importance or value of this service to the Treasury is not measurable in dollars and cents," the report stated.

This mirrored the sentiment of the bankers interviewed for the 1960 study. As they were during the Second World War, bankers were eager to obscure the fact that TT&L accounts effectively gave banks a government subsidy for their role in issuing the government's own money. Instead, bankers stressed the public service that they were providing by helping to underwrite and "finance" the federal debt. For example, one statement issued by a bank participating in the TT&L program pointed out that

> In all financings allowing tax and loan credit, the underwriting function is performed by the commercial banks. At those crucial times during periods of tight money when adequate coverage of a Treasury offering is a serious question, the underwriting of the issue has been provided by the banks through use of tax and loan credit. How can the value of this service be measured? It cannot.

The bank's statement went on to argue that the Treasury benefited from both lower rates of interest and the "wealth of experience and investment knowledge" that commercial banks placed at the disposal of the Treasury.[148]

[148] "Report on Treasury Tax and Loan Accounts, Services Rendered by Banks for the Federal Government and Other Related Matters" (U.S. Department of the Treasury, June 15, 1960), 51.

It is questionable whether commercial banks provided incalculable value to the Treasury in underwriting bond issues with TT&L credit. It was not civic virtue, after all, that led banks to provide these services. Banks calculated the cost of the service they provided and still made a profit. And costs were low. As the Federal Reserve Bank of Dallas pointed out in a 1972 article,

> when banks were allowed to subscribe to Treasury offerings with TT&L credits, they faced no initial cost other than the cost of the funds it must set aside to meet the increase in required reserves. In effect, the bank is allowed to earn interest on the securities without giving up an equivalent amount of funds until the Treasury draws down its account.

Such purchases, the article noted, amounted to nothing more than a "bookkeeping entry" that provided banks with risk-free revenue.[149]

If the use of TT&L accounts helped to ensure that there would be sufficient demand for new Treasury issues, they also enhanced demand for outstanding issues on the secondary market. Commercial banks were required to maintain collateral against any deposit balances held in TT&L accounts. This means that when they received funds on behalf of the Treasury—say, for payments of withheld income taxes—they had to use those funds to purchase adequate collateral. Not coincidentally, U.S. Treasuries were among the only securities eligible to serve as collateral at face value.[150]

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[149] "Tax and Loan Accounts," 9.

[150] The Treasury specified that the only securities eligible to serve as collateral at face value were U.S. government securities, U.S. agency securities, and obligations "fully and unconditionally guaranteed by the United States Government." See United States Treasury Department, "Department Circular No. 92: Special Deposits of Public Moneys Under the Act of Congress Approved September 24, 1917 (as Amended)," November 10, 1949.

The result was that tax payments, rather than paying down the national debt, as we might expect, increasingly served to keep the outstanding debt liquid. For example, imagine that the Treasury deposited proceeds from income tax withholdings into a TT&L account. The commercial bank that managed this TT&L account would then be required to purchase adequate collateral to cover the new deposits. In most cases, it would look to purchase Treasury securities on the secondary market. As the Treasury drew down balances on its TT&L account (funds are transferred to the Treasury's account at the Federal Reserve before they are spent), the bank might then sell the Treasury security that it had previously held as collateral. The continual ebb and flow of deposit credits in TT&L accounts thus has the effect of boosting secondary market trading—especially since the Treasury does not transfer funds out of all its commercial bank accounts evenly across time.

The outcome of this arrangement was rather surreal: Not only were banks allowed to pay for new Treasury debt issues with their own liabilities, but they were also allowed to earn interest on the Treasury debt they held as collateral against the Treasury's own tax income. Much like the Fed's use of dealer repo, this byzantine procedure was in essence a continuation of wartime practices. The peg was the conspicuous public face of wartime administration of the government securities market. But even as the peg was abandoned, the practice of allowing commercial banks to monetize government debt with their own deposit liabilities was continued. While peacetime balances and cashflows in TT&L accounts during the 1950s did not quite match the peaks of war mobilization, they came strikingly close. Just as Federal

Reserve repo credit subsidized nonbank dealers' market making activity, TT&L accounts subsidized commercial banks' underwriting of Treasury debt and boosted banks' purchases in the secondary market. Both practices helped to guarantee liquidity to investors without forcing the Fed to maintain a rigid yield curve. Likewise, both practices naturalized liquidity as the product of the market rather than the state. Private actors—commercial banks and dealers—appeared to be the fundamental players in the market for government securities.

The Legacy of the Accord: Monetary Restraint, Fiscal Restraint, and Liquidity Support

A common theme in left-wing historiography is that the Treasury-Federal Reserve Accord 1951 made the Fed less responsive to democratic pressures and more responsive to the needs of the financial sector. This allowed the Fed to pursue restrictive monetary policy in the 1950s that was more concerned with disciplining an unruly labor movement than it was with rigorously pursuing its mandate to achieve maximum employment.[151]

This agenda of monetary restraint would not have been politically possible, however, without liquidity support in the government securities market. As we have

[151] The drive to discipline labor was justified as inflation control—particularly after the UAW's "Treaty of Detroit" solidified public acceptance of so-called escalator clauses that linked wages to labor productivity and cost-of-living.
See Dickens, "U.S. Monetary Policy in the 1950s"; Stein, "Fearing Inflation, Inflating Fears," chap. 2; Epstein and Schor, "The Federal Reserve-Treasury Accord"; Gerald Epstein and Juliet Schor, "Corporate Profitability as a Determinant of Restrictive Monetary Policy: Estimates for the Postwar United States," in *The Political Economy of American Monetary Policy*, ed. Thomas Mayer (New York: Cambridge University Press, 1990), 51–63.

seen, liquidity support was absolutely necessary for enlisting the financial sector's support for monetary restraint. Bankers, dealers and insurance companies were uniformly unwilling to accept bond market disorder as the necessary price of monetary contraction. On the other hand, if it appeared that the Federal Reserve was too closely administering the government securities market (and not subjecting it to autonomous "market forces"), it would be vulnerable to political pressure to lower interest rates in support of labor, agriculture and homebuyers. Framing liquidity support as a technical matter of monetary plumbing—of "defensive" rather than "dynamic" policy—effectively removed it from the arena of political contestation.

Indeed, the discursive shift from "maintaining orderly markets" to "correcting disorderly markets," made it appear that, apart from rare, exceptional instances of intervention, the Fed was essentially letting the free market determine prices. Only once during the 1950s did the FOMC officially declare a disorderly condition in the bond market—on July 18, 1958. The declaration of disorder gave the account manager carte blanche to purchase government securities of all maturities without limitation. Within a week, the Fed had purchased nearly $1.2 billion of Treasury securities. According to Malcolm Bryan of the Atlanta Fed, this was "one of the most massive support operations ever undertaken."[152] And yet, by August, the financial press was already brushing this off as an anomaly. Joseph Slevin of the *New York Herald Tribune* wrote approvingly that the Fed had since turned off the taps and

[152] Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, July 29, 1958," 1958, 18.

returned to a "doctrine of non-intervention." Because the Federal Reserve "believes in free markets," it was once again "letting bond prices and yields find their own level."[153] Clearly, the day-to-day "defensive" liquidity support in the government securities market did not register. The Fed's discursive strategy of separating liquidity support from the operation of "free markets" had worked.

Subsuming liquidity support under the label of defensive "non-intervention" also freed the Eisenhower administration to legitimate a discretionary program of fiscal conservativism as a necessary response to the objective discipline of the bond markets. For example, in 1959, when Eisenhower lobbied Congress to remove a statutory maximum interest rate of 4.25% on long-term Treasury bonds, he legitimized his position by invoking the "natural" forces of government securities market:

> In our democracy no man can be compelled to lend to the Government on terms he would not voluntarily accept. Therefore, when the Government borrows, it can do so successfully only at realistic rates of interest that are determined by the supply and demand for securities as reflected in the prices and yields of outstanding issues established competitively in the government securities market. … Any debt management device which would seek to interfere with the natural interaction of the competitive forces of our free economy and produce unnatural reductions in interest rates would not only breach the fundamental principles of the free market, but under current conditions could only be drastically inflationary.[154]

[153] Joseph R. Slevin, "Fed Keeps Hands Off Declining Bond Mart: Is Adhering To Faith in Free Trade," *New York Herald Tribune*, August 14, 1958.
[154] "Eisenhower Message on Bond Interest Ceilings and Federal Debt Limit," *New York Times*, June 9, 1959.

Here again, the idea was that the government securities market was an autonomous force that placed natural limits on the ability of the Federal Government to place its debt, and thus on its ability to spend.

As we have seen, the real constraint was the Fed itself. What mattered for the success of a new Treasury issue was not whether the interest rates offered drew sufficient demand in the "free market." What mattered was that the Federal Reserve was satisfied that the Treasury had *attempted* to price its securities in line with the money market conditions that the Fed was interested in creating. As far as Fed officials were concerned, the division of responsibilities between the Federal Reserve and the Treasury established in the Accord cemented the idea that, as long as the Federal Reserve believed the Treasury had intended to price its securities "to the market," then the Fed would bear any residual responsibility for ensuring the success of the financing. William Treiber of the FRBNY explained this position clearly in a 1957 FOMC meeting:

> [T]he Treasury should price its securities in line with market rates. When it does so—when it submits itself to the discipline of the market—the System has a responsibility to avoid action that may jeopardize the financing. We should then, as we have consistently since the accord, recognize that the initial impact of an operation as large as a Treasury financing may create temporary digestive disturbances with which we need be concerned.[155]

In other words, the success or failure of a Treasury issue hinged on whether the pricing lined up with a particular normative vision for what market rates *ought* to be,

[155] William Treiber explained this position in detail in a 1957 FOMC meeting: Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, May 7, 1957," 1957, 12.

not on the actual investor interest. As long as the Fed believed the Treasury was cooperating with its credit policy, it would provide enough liquidity support to ensure that it didn't fail.

All this is to say that the combination of monetary constraint and liquidity support in the 1950s was not mandated by any economic law. It was a policy choice—one designed to subject labor to the harsh discipline while insulating both investors and the U.S. Treasury from the threat of financial volatility.

7. CONCLUSION

The bills only policy formally came to an end in 1961, a victim of changing tides in international trade and finance. Immediately after World War II, U.S. exports were desperately needed in Europe. From 1946-1949, the United States ran a trade surplus large enough that that even with Marshall aid sending billions of dollars abroad, the overall balance of payments position remained positive until 1950. Starting in the 1950s, however, the balance went negative. Declining trade surpluses combined with climbing private capital investment abroad to push gold out of the country. By 1958, gold outflows amounted to $2.2 billion. For the first time since the 1930s, the Fed had to pay serious attention to gold reserves and international payments.[1]

In the years that followed, pressure from both Congress and the Kennedy administration mounted for the Fed to staunch the outflow. At the same time, there was pressure to avoid raising long-term rates too steeply. Achieving both goals simultaneously would require active yield-curve intervention and the abandonment of bills only.[2] When the persistent gold outflow dovetailed with a domestic recession in 1960-61, Fed officials were finally convinced that a new program was needed to concurrently address the balance of payments problem and the economic downturn at

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[1] Francis A. Lees, "The U. S. Balance of Payments in the Postwar Period," *Financial Analysts Journal* 21, no. 3 (1965): 31–38.

[2] Even Senator Paul Douglas, the longtime ally of the independent Fed, had turned against Martin at this point, calling on him to abandon the bills only policy. See Edwin L. Dales, "Reserve Is Urged to Change Policy," *New York Times*, March 15, 1960, sec. Business Financial.

home. The result, called "Operation Twist," aimed to "twist" the yield-curve: increasing short-term rates with open market sales while holding down long-term rates with open market purchases. Although chair Martin expressed doubts about whether yield curve management could ultimately win out against the "natural forces" of the market—and was also concerned that this operation would make it "easy to fall back into pegged rates again"—he reluctantly joined the FOMC majority in voting to abandon bills only in February 1961.[3]

While the bills only policy was short-lived, the discursive and institutional dividing lines it helped to establish between the short-term money market and long-term capital markets lasted for nearly half a century. The driving idea was that, even as the Federal Reserve directly controlled short-term funding conditions, it would allow "the market" (a chain of large financial institutions engaged in arbitrage operations) to set the term premium on long-term debt. Even if short- and long-term yields were closely linked, and even if the Federal Reserve provided liquidity support to ensure price continuity and minimize volatility in the bond market, the latter would be treated as an expression of market judgments and expectations for fiscal policy. In this sense, fiscal policy would remain nominally dependent on autonomous "market conditions" that were not directly administered by the Fed.

As we have seen in the preceding chapters, however, market conditions were never in fact autonomous from the Fed. To the extent that bond yields *did* reflect the

[3] "'61 Policy Shift by the Reserve Stemmed From Year of Conflict," *New York Times*, August 14, 1962, sec. Business and Finance; Federal Open Market Committee, "Minutes of the Meeting of the Federal Open Market Committee, February 7, 1961," 1961.

judgments of market actors in the wake of bills only, these judgements were, by and large, speculations about what the Fed would do next, rather than independent evaluations of a "real economy" whose dynamics were neatly separable from the Federal Reserve's policy actions. More importantly, the very existence of a stable, continuous, and liquid market in Treasury bonds was the result of a regime in which government security dealers would never be denied access to the liquidity necessary to make the market. I have argued that such operations to maintain orderly bond markets were a political precondition for monetary contraction in the 1950s. Without some measures to insulate capital markets from the harshest effects of monetary contraction, organized capital would never have allowed tight monetary policy to see the light of day.

These experiments combining "free" bond markets with liquidity support to limit price volatility in the 1950s were a dress rehearsal for more dramatic deflationary shocks administered by Paul Volcker's Fed in the 1980s. The story of the "Volcker Shock" is well known: to bring inflation to heel, the Federal Reserve introduced punishingly high interest rates that both undercut the power of the U.S. working class and devastated the Global South. This inaugurated the neoliberal turn. Less well-known, however, is that Volcker was deeply concerned with ensuring that monetary tightening would not put pressure on the liquidity of the government securities market. Under Volcker's leadership the New York Fed offered abundant liquidity support to securities dealers through repo loans on Treasury securities, and Volcker himself actively pursued policies that would bolster government security

market liquidity by exempting repurchase agreements on Treasury bonds from the "automatic stay" rule (which froze repo collateral during bankruptcy proceedings).[4] Unlike the broader monetary policy stance associated with the Volcker Shock, this kind of action occurred under the radar. It was technical and depoliticized.

In the past few decades, the pretense of a separation between short-term credit conditions and money market liquidity, directly managed by the Fed, and long-term conditions in the capital markets, ostensibly set by market forces, has become even thinner. With the rise of shadow banking and collateralized finance in the $4.6 trillion repo market, short- and long-term lending conditions have become inextricably linked.[5]

This is especially true when it comes to the long-term borrowing of the U.S. Treasury. Prior to the 2007-9 financial crisis, the principal source of collateral in private repo markets was privately manufactured, securitized assets. After the crisis revealed that these assets were not as safe as markets thought, Treasury bonds became the dominant form of repo collateral. Because of this, a small increase in bond yields

[4] In the 1980s, liquidity support increasingly took the form of support for the growing repo market, in which short-term loans were secured by Treasury securities. After the government securities dealer Drysdale collapsed in 1982, the FRBNY jumped to action. It headed off a generalized liquidity crisis by temporarily suspending any limits on its repo loans of Treasury securities to dealers. It also reminded markets that it stood ready to serve as a lender of last resort to anyone who was threatened by the Drysdale failure. Later in 1982, when a court ruling threatened to undermine repo market liquidity by classifying repos as loans rather than outright transactions in bankruptcy proceedings, Paul Volcker himself intervened. Reclassifying repos as loans would, he argued, be catastrophic: "the rippling effect of the potential loss of liquidity or capital on market participants could generally disrupt the repo market and cause an otherwise manageable and isolated problem to become generalized." Volcker subsequently sought legislation exempting repos on Treasury securities from the "automatic stay" rule. Kenneth Garbade, "The Evolution of Repo Contracting Conventions in the 1980s," *Economic Policy Review* 12, no. 1 (July 2006): 6, 9.

[5] See Zoltan Pozsar et al., "Shadow Banking," FRBNY Staff Reports, no. 458 (New York, NY: Federal Reserve Bank of New York, 2010).

(a decline in bond prices) can now lead to a situation where highly leveraged repo borrowers are forced to sell off assets to meet margin calls. Conversely, a precipitous decline in bond yields (an increase in bond prices) can be equally destabilizing. If the term premium on long-dated securities becomes too narrow (or negative), banks and other financial intermediaries who rely on a positive yield curve to make a profit will become reluctant to lend, potentially resulting in a collapse in market liquidity. Overall, this has meant that episodes of illiquidity and market disorder have become more common in recent years. The bond market meltdown of March 2020, discussed in the introduction, is the most conspicuous example. But there are others—notably the "flash crash" of October 2014, the repo market collapse of September 2019, and the "mini flash crash" of February 2021.[6]

In this environment, both the Federal Reserve and the U.S. Treasury have had to repeatedly intervene to support liquidity and stable pricing in both the long-term bond markets and the repo markets collateralized by them. Such interventions are part of a broader monetary regime that economist Daniela Gabor has labelled "shadow monetary financing," in which large-scale monetization of Treasury debt is

[6] Adam Copeland, Isaac Davis, and Antoine Martin, "Lifting the Veil on the U.S. Bilateral Repo Market," *Liberty Street Economics* (blog), July 9, 2014, https://libertystreeteconomics.newyorkfed.org/2014/07/lifting-the-veil-on-the-us-bilateral-repo-market.html; Sissoko, "The Collateral Supply Effect on Central Bank Policy"; Gary Gorton and Andrew Metrick, "Securitized Banking and the Run on Repo," *Journal of Financial Economics* 104, no. 3 (2012): 425–51; Tobias Adrian, Arturo Estella, and Hyun Song Shin, "Monetary Cycles, Financial Cycles, and the Business Cycle," FRBNY Staff Reports, no. 421 (New York, NY: Federal Reserve Bank of New York, 2010); "The U.S. Treasury Market on October 15, 2014," Joint Staff Report, July 13, 2015, https://www.treasury.gov/press-center/press-releases/Documents/Joint_Staff_Report_Treasury_10-15-2014.pdf; Gara Afonso et al., "The Market Events of Mid-September 2019," CEPR Discussion Paper no. 14467 (London: Center for Economic Policy Research, 2020); Brian Chappatta, "Bond Market Screams for Help But No One Answers," *Bloomberg*, February 25, 2021.

undertaken to provide easy and stable credit conditions for the shadow banking sector.[7] In this regime, Treasury bonds function as a kind of base money for shadow banks. Where the traditional banking sector funds its activities by issuing demand deposit liabilities, shadow banks borrow in repo markets against Treasury bond collateral. As Gabor argues, the stability of this shadow money regime requires that the Treasury act as a kind of "shadow central bank," a "collateral factory" for nonbank financial intermediaries.[8]

In contrast to the Truman Administration's attempts to use interest-rate controls and monetary financing to support industrial policy and enhance the fiscal capacity of the state, shadow monetary financing is aimed not at facilitating public fixed capital investments or infrastructure development. Instead, it is aimed at propping up the value of financial assets. Still, it may create a strategic political opening for the Left. Much like the early postwar years, covered in chapters 4 and 5 of this dissertation, we are now in a situation where the asset economy is largely dependent on the Federal Reserve's continued ease and backing of financial markets.[9] If a pro-labor government (optimistically, the Biden administration) were successful in creating a tight labor market, and thus some inflationary wage pressure, it would be politically very difficult for the Federal Reserve to increase unemployment by implementing tight monetary policy. As the economists Lance Taylor and Nelson H.

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[7] Daniela Gabor, "Revolution without Revolutionaries: Interrogating the Return of Monetary Financing," Transformative Responses to the Crisis (Berlin: Finanzwende and Heinrich Böll Stiftung, 2021), 12.
[8] Gabor, "The (Impossible) Repo Trinity," 969, 988.
[9] See Lisa Adkins, Melinda Cooper, and Martijn Konings, *The Asset Economy* (Cambridge, UK: Polity, 2020).

Barbosa-Filho point out, the asset price deflation that would likely result from tight monetary policy could translate into "political resistance from Wall Street and affluent households."[10] When investment bankers and wealthy homeowners can't afford to be inflation hawks, historian Tim Barker explains, "the cause of full employment may have gained an awkward but powerful ally."[11]

At the same time, the popular resistance to Wall Street bailouts that has emerged since the crisis of 2007-9 could make any special support that the Federal Reserve might supply to financial markets politically vulnerable. For evidence that the Fed feels political pressure to expand its support efforts beyond the financial sector, consider the Fed's response to COVID-19. During the COVID crisis, the Federal Reserve resurrected the Primary Dealer Credit Facility, a facility created in 2008 to provide liquidity to government security dealers. But unlike in 2008, it also introduced a Main Street Lending Program, designed to support small- and medium-sized businesses, and a Municipal Liquidity Facility, designed to insulate state and local governments from COVID-related cash-flow pressures. Both facilities were far from adequate to the need.[12] But they offer a glimmer of possibility—a partial vision of what the Federal Reserve might look like if political pressure compelled it to offer liquidity (and indeed, credit) support to broader swaths of the population, rather than

[10] Lance Taylor and Nelson H. Barbosa-Filho, "Inflation? It's Import Prices and the Labor Share!," INET Working Paper No. 145 (Institute for New Economic Thinking, January 20, 2021).
[11] Tim Barker, "Preferred Shares," *Phenomenal World* (blog), June 24, 2021, https://phenomenalworld.org/analysis/wage-share.
[12] On the shortcomings of these programs, see, e.g., Christopher Condon and Catarina Saraiva, "The Fed Effort to Save Midsize Firms Isn't Working, and Here's Why," *Bloomberg Businessweek*, November 30, 2020; Matthew Cunningham-Cook, "The Federal Reserve Rescued Corporations — And Let the Rest of Us Suffer," *Jacobin*, October 19, 2020.

just pumping funds into banks and financial markets in the hopes that a more broad-based economic stimulus might eventually trickle down.

Overcoming the entrenched hierarchies of private power in the U.S. monetary system in favor of a more robust egalitarian architecture of public money will never be simple. But there are reasons for cautious optimism in the present conjuncture. There are several feasible reforms within reach to push further in the direction of a more egalitarian monetary system. For one, the proposal for FedAccounts—which would make bank accounts at the Federal Reserve available to consumers, rather than just banks and financial institutions—was within a hair's breadth of passing through Congress early in 2020.[13] Along similar lines, proposals for making public banking services available at U.S. Post Offices have gained traction among progressives in recent years. As Mehrsa Baradaran, the foremost proponent of postal banking, argues, the working poor should not have to go to pawnshops or pay punishingly high rates of interest on payday loans when they are faced with illiquidity. Rather, universal access to public banking facilities should ensure that workers have just as much of a right to cheap liquidity support as government security dealers.[14]

Beyond the immediate reform agenda, the vulnerability of financial markets to episodes of disorder could give working class social movements a wedge to make more radical demands. Political philosopher Robert Meister argues that "chokepoints"

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[13] See "Digital Dollars: Amid the COVID-19 Crisis, Support for a U.S. Digital Currency Emerges," *The National Law Review*, April 9, 2020; John Crawford, Lev Menand, and Morgan Ricks, "FedAccounts: Digital Dollars," *George Washington Law Review* 89, no. 1 (2021): 113–72.
[14] See Mehrsa Baradaran, *How the Other Half Banks: Exclusion, Exploitation, and the Threat to Democracy* (Cambridge, MA: Harvard University Press, 2015).

in the U.S. financial system could be exploited by a militant working class movement to make a credible threat to financial market liquidity. Meister imagines a scenario in which political leverage created by the threat of a disorderly disaccumulation of asset values could allow workers to extract something approximating historical justice as the price of restoring orderly markets.[15]

Whatever approach one favors—reformist incrementalism, financial sabotage, or something in between—challenging the privileged position of private finance in the public monetary infrastructure will require deflating the fiction of a stable state/market boundary in bond markets. It is not the abstract forces of supply and demand that make Treasury bonds a safe, liquid investment. It is the Federal Reserve, which itself is a delegated agent of the United States Congress. The derisking of the bond market—the provision of orderly market conditions—is thus a public service that a congressional agency provides to the financial sector at no cost. To the extent that safe, liquid sovereign debt markets are a prerequisite for private debt and equity markets writ large,[16] it is not much of a stretch to say that the Federal Reserve's guarantee of orderly bond markets is, in effect, a guarantee of private financial markets as such. Public finance and public money need not be beholden to the entrenched infrastructural power of the private (shadow) financial sector. Insisting on

[15] See Meister, *Justice Is an Option*.

[16] Legal scholars Robert Hockett and Saule Omarova highlight the deep dependency of private equity and private debt on sovereign debt markets. Government securities function: (1) as a "safe asset" they function as a liquidity reservoir, a vehicle for storing value when the rest of the market gets excessively volatile; (2) as a benchmark "risk-free" security that is used to price riskier private securities; and (3) shadow-bank "base money," or a form of collateral that allows shadow banks to perform substantively the same function as the traditional banking industry. See Hockett and Omarova, "The Finance Franchise," sec. IV.

this fundamentally political determination of asset values will be essential for any movement that seeks to contest the institutional legacy of half a century of financialization.

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