LABORATORIES OF CENTRAL BANKING

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Abstract

Since its founding in 1913, the central bank of the United States has enjoyed a reputation as an erudite institution. Rigorous, well-resourced, and expansive research has become a hallmark of the Federal Reserve System. Indeed, research itself is a core function of the Fed: it both underpins Fed policy and serves as the vehicle through which the Fed communicates its purpose and aims to the public. Spread across twelve regional Reserve Banks, the Fed's research function is also uniquely experimental in its nature.

Yet to date, little scholarly attention has been paid to the research function of the Federal Reserve. Consequently, important questions remain unanswered: what are the legal and policy implications of research experimentation throughout the Reserve Banks, which are private institutions albeit serving public aims? Drawing together primary source documents and a novel data set of nearly 5,000 hand-collected research documents published by the twelve regional Reserve Banks, this Article tells the untold story of the research function of the Federal Reserve from 1913 through the present day.

The historical and empirical narrative demonstrates how the research function dedicated the System to public transparency, and enabled intellectual exploration and experimentation that led to sounder policy. However, it also underscores the delicate balance between experimentation among the regional Reserve Banks and the need for accountability to the Federal Reserve's Board of Governors. In recent years, as the research function has grown in scope and drifted away from the Board's purview, there exists potential for politicization of the System in the pursuit of new agendas.

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I. Introduction

In a 1932 dissent, Justice Louis Brandeis notoriously remarked, "[i]t is one of the happy incidents of the federal system that a single courageous state may . . . serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country." In coining the (now-famous) metaphor, "laboratories of democracy," Brandeis was remarking on the constitutional bulwark of state against federal power—and the localized policy experimentation this structure enables and encourages. Though Brandeis was writing during the birth, indeed explosion, of the American administrative state and President Roosevelt's "New Deal," only the central bank—which had been founded nearly twenty years before-would replicate in institutional form the federalist structure Brandeis extolled. And it is precisely by virtue of its federalist structure that the central bank—the Federal Reserve System (the Fed or the System)—came to possess a similar such ability to experiment so freely with policy ideas.

This Article considers how the Federal Reserve acts as a laboratory of central banking through the research functions of each of the System's twelve regional Reserve Banks (the Reserve Banks). While legal scholars have increasingly focused on the Fed's legal

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² New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932).

power and authority,³ its independence,⁴ and its legitimacy⁵—and macroeconomists remain ever dedicated to understanding the optimality of various of the Fed's policy choices⁶—central banking scholarship remains silent in regard to the Fed's authority to conduct *research* on a wide range of economic issues. As a result, there is very little understanding of what drives the intellectual environment across the Federal Reserve System and, accordingly, the forces within the Fed that steer its policy agendas and inform its policy decisions. To fill that gap, the Article draws together primary source documents not before discussed in the literature as well as a new empirical data-set to tell the legal and policy story of the research function of the Federal Reserve System from its founding in 1913 through the present day.

³ See, e.g., Peter Conti-Brown, The Power and Independence of the Federal Reserve (2016); Christina Parajon Skinner, Central Bank Activism, 71 Duke L.J. 247, 312 (2021); see also Kathryn Judge, Three Discount Windows, 99 Cornell L. Rev. 795, 809–21 (2014) (studying the propensity of banks to use the Fed's discount window lending authority); Jonathan Macey, Fair Credit Markets: Using Household Balance Sheets to Promote Consumer Welfare, 100 Tex. L. Rev. 683, 735–44 (2022) (urging Fed emergency facilities be made more widely available to households); David Zaring, The Government's Economic Response to the Covid Crisis, 40 Rev. Banking and Fin. L. 315 (2021) (discussing the legality of the Fed's emergency facilities in 2020).

⁴ See Rosa Maria Lastra, The Independence of the European System of Central Banks, 33 Harv. Int'l L.J. 475, 490 (1992); Rosa Lastra & Charles Goodhart, Populism and Central Bank Independence, 29 Open Econ. Rev. 49, 59 (2018); Christina Parajon Skinner & Michael Salib, Executive Override of Central Banks: A Comparison of Legal Frameworks in the U.S. and U.K., 108 Geo. L.J. 905, 909 (2020).

⁵ See, e.g., Carola C. Binder & Christina P. Skinner, The Legitimacy of the Federal Reserve (Aug. 9, 2021) (manuscript on file with authors); see also John O. McGinnis, Democratic Dilemmas of Elite Institutions: Comparing the Court and the Fed 40 (Oct. 4, 2021) (unpublished manuscript) (on file with authors) ("The Federal Reserve's 'ethos of techno-pragmatism'—its careful commitment to apolitical values of evidence and professional craft—will allow it to develop the expertise that will maintain its long run legitimacy and independence even while molding its actions to address ideologically fraught issues.").

⁶ See Richard Clarida et al., The Science of Monetary Policy: A New Keynesian Perspective 2 (J. of Econ. Literature, Vol. XXXVII, Working Paper No. 7147, Dec. 1999).

The research function is one of the longest-standing roles of the Federal Reserve. While many of the Fed's present-day powers were added by amendments to the Federal Reserve Act, research was contemplated in the original 1913 Act.⁷ The research departments at both the Reserve Banks and the Board of Governors (the Board) were established shortly after the Fed's founding, primarily to collect data on member banks' conditions, and to report on regional business and financial conditions.⁸ Over the years, the Fed's research function grew in depth, scale, and sophistication.⁹ Today, the research produced by the Reserve Banks and the Board combined is nearly twenty times the volume produced by other similar regulators, like the Financial Stability Oversight Council, ¹⁰ the Office of Financial Research, ¹¹ and the Securities and Exchange Commission. ¹² And it covers a wide range of topics. ¹³

While the Board also continues to conduct research, the bulk of the System's research is produced by the twelve regional Reserve

⁷ See Federal Reserve Act, 12 U.S.C. § 226 (1913).

⁸ See id. at 12 ("In selecting five appointive members of the Federal Reserve Board, not more than one of whom shall be selected from any one Federal reserve district, the President shall have due regard to a fair representation of the different commercial, industrial and geographical divisions of the country.").

⁹ See Bd. of Governors of the Fed. Rsrv. Sys. Div. of Rsrv. Bank Operations, 2021 Federal Reserve Bank Budgets Addendum 6–11 (2021) (showing that an increasing research budget may be driven by growing "monetary and economic policy" expenses, in which operating and personnel expenses related to research are included).

Working Papers, Office of Fin. Rsch., financialresearch.gov/working-papers (last accessed Aug. 2, 2021) (showcasing Financial Research collection of working research papers).

¹¹ See Studies and Reports, FIN. STABILITY OVERSIGHT COUNCIL, https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/fsoc/studies-and-reports/ (last accessed Sept. 28, 2022) (featuring FSOC working paper collection).

¹² Staff Papers and Analyses, SEC, https://www.sec.gov/dera/staff-papers (last accessed Aug. 2, 2021).

¹³ See Lawrence H. White, The Federal Reserve's Influence on Research in Monetary Economics, 2 Econ. J. Watch 325, 325–27 (August 2005) (observing that the Fed employs more monetary economists that all major academic research departments combined).

Banks.¹⁴ Indeed, as entities distinct from the Board and the Federal Open Market Committee (FOMC), the Reserve Banks collectively have carved out their own unique role in the System as advancers of knowledge and best practices concerning specialized issues impacting the banks and local economies within their district, and as repositories of history and institutional knowledge.¹⁵

Today, their research agendas often treat topics that have not yet been addressed in the mainstream supervisory or regulatory policies set by the Board. Broadly speaking, these Reserve Bank research functions generally focus on speech-giving, holding conferences, and providing education concerning a particular special issue. In the most formal aspect of this function, the Reserve Banks produce academic-quality research in the form of working papers, which are made publicly available on the Reserve Bank websites. Many of these working papers, written by Ph.D. economists, 9 go on

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¹⁴ See Bd. of Governors of the Fed. Rsrv. Sys., supra note 8 at 6–7 ("Growth in monetary policy and public programs are for increased resources dedicated to regional economic research").

¹⁵ About the Fed: Structure of the Federal Reserve System, FED. RSRV. BD., (Oct. 1, 2021),

federalreserve.gov/aboutthefed/structure-federal-reserve-banks.htm

^{(&}quot;[T]hrough their leaders and their connections to, and interactions with, members of their local communities, Federal Reserve Banks provide the Federal Reserve System with a wealth of information on conditions in virtually every part of the nation—information that is vital to formulating a national monetary policy that will help to maintain the health of the economy and the stability of the nation's financial system.").

¹⁶ See id. ("Each Reserve Bank gathers data and other information about the businesses and the needs of local communities in its region. That information is then factored into monetary policy decisions by the FOMC and other decisions made by the Board of Governors.").

¹⁷ See Staff Papers and Analyses, supra note 11 (providing examples of special issues Fed research might address).

¹⁸See, e.g., Working Papers, Fed. Rsrv. Bank of Cleveland, www.clevelandfed.org/newsroom-and-events/publications/working-papers.a spx (last accessed Sept. 28, 2022) (showcasing Cleveland Fed's collection of working research papers).

¹⁹ Job listings for economists at the Reserve Banks list a Ph.D. in economics, finance, or a related field as a qualification. They typically promise strong research support, research assistants, and good computing and data access as benefits of the job. Job listings accessed. *See JOE Listings (Job Openings for Economists)*, Am. Econ. Ass'n, https://www.aeaweb.org/joe/listings [https://perma.cc/T22M-ZP4K].

to be presented in conferences or seminars, and published in peer-reviewed academic journals.

Each Reserve Bank, in turn, has further developed an identity around specific issue areas. The New York Fed's work on ethics and culture in large financial institutions is a good example. Since 2016, New York Fed Presidents and other senior executives have given high-profile speeches on the problems associated with the ethical culture among the large, systemically important banks in the New York area.²⁰

The New York Fed has also hosted conferences on this issue, convening experts from academia and the private sector to discuss problems and possible industry-led solutions.²¹ In a similar vein, the New York Fed has constituted an Education and Industry Forum, mandated to develop case-studies on ethics and culture for use in business school curricula.²² The Federal Reserve Bank of San Francisco has adopted a similar focus-area approach in regard to climate risk. In November 2019, that Reserve bank hosted a conference titled "The Economics of Climate Change," which featured discussions surrounding the importance of addressing the financial risks of climate change.²⁴

²⁰See Governance & Culture Reform, FED. RSRV. BANK OF N.Y, https://www.newyorkfed.org/governance-and-culture-reform

[[]https://perma.cc/EV9H-P99D] (showcasing links to speeches made by members of the Federal Reserve Banks on Culture and Reform).

²¹ See id. (providing links to governance and cultural reform web series, events, and conferences).

²² Education and Industry Forum on Financial Services Culture, FED. RSRV. BANK OF N.Y., https://www.newyorkfed.org/eif [https://perma.cc/M2AK-P7TJ] ("The Education and Industry Forum on Financial Services Culture (EIF) comprises business school professors and leaders from financial services firms who are committed to promoting the development of an agile, adaptable, and ethical future workforce in the financial services industry.").

²³ The Economics of Climate Change,

FED. RSRV. BANK OF S.F. (Nov. 8, 2019), www.frbsf.org/economic-research/events/2019/november/economics-of-climate-change/climate-change-risk [https://perma.cc/ZWV5-9PJ3] (showcasing the "Climate Change Risk" video shown at the Federal Reserve Bank of San Francisco's conference and the "discussion by Thomas Mertens, Federal Reserve Bank of San Francisco.").

²⁴ *Id.* ("As policies are implemented to mitigate climate change, they will affect prices, productivity, employment, and output in ways that could have implications for monetary policy. Just on its own, the large amount of

Throughout the history of the Federal Reserve System, the research function of the Reserve Banks—and their respective outputs—has been a vibrant, healthy aspect of the American central banking system. It has formed the intellectual foundation of the System—and driven an ethos around thought leadership, innovation, and education.²⁵ The research function has also maintained balance in the System between diverse regional and centralized federal power. Finally, research has been a pillar of outreach, cementing connections between the public and the Federal Reserve, thereby compensating for the otherwise lack of democratic representation associated with the central bank. On that view, the research function has been critical to the System's legitimacy as well as its credibility as a technocratic expert on the broad economy.

But there are potentially troublesome aspects to the research function as well. The Reserve Banks, though not legally authorized in the Federal Reserve Act to create policy in the first instance (that is for the Board), do have indirect influence over the Fed's direction of travel.²⁶ Five Reserve Bank Presidents occupy seats on the FOMC, and thus have input into monetary policymaking.²⁷ By tradition, the

Pricing Poseidon: Extreme Weather Uncertainty and Firm Return Dynamics

(Fin. & Econ. Discussion Series, Working Paper No. 201954, 2019).

uncertainty regarding climate-related events and policies could hold back investment and economic activity."); see also Lael Brainard, Governor, Bd. of Governors of the Fed. Rsrv. Sys., Why Climate Change Matters for Monetary Policy and Financial Stability (Nov. 8, 2019), https://www.federalreserve.gov/newsevents/speech/brainard20191108a.htm (citing William Blyth et al., Investment Risks under Uncertain Climate Change Policy, 35 Energy Pol'y 5766–73 (2007)); Mathias S. Kruttli et al.,

²⁵ Memorandum from the Bd. of Governors of the Fed. Rsrv. Sys. on Responsibilities of Directors of the Federal Reserve Banks (Apr. 6, 1948) [hereinafter Directors' Responsibilities Memo] ("There should be no limit to the work of the Federal Reserve Banks in the field of cooperation, education, and leadership. The good that the Banks can do is limited only by the intelligence, courage, and leadership of their directors and officers.").

²⁶ See Education and Industry Forum, supra note 21 ("The Federal Reserve Act of 1913 gave the Federal Reserve responsibility for setting monetary policy."); The Economics of Climate Change, supra note 22 (observing eligible Reserve Bank directors received "significant input from the Board of Governors...to inform their reappointment decisions.").

²⁷ The President of the Federal Reserve Bank of New York is a permanent member of the FOMC, while the other Reserve Bank Presidents serve rotating terms. *See Federal Open Market Committee*, Bd. of Governors of

Board regularly exchanges views with the Reserve Bank Presidents through the Presidents' Conference and during meetings with Reserve Banks' Chairmen.²⁸ The staff of the Reserve Banks also routinely interact with Board staff at working level.²⁹ As such, the Reserve Banks' views, which are informed by their research function, can and likely do reach and influence the Board—whether by accident or design.³⁰

The Reserve Banks can also, through their stature in the Federal Reserve System, influence public opinion about the economy and the general purpose and aim of the Federal Reserve. While this may seem anodyne in ordinary times, it can prove controversial in certain periods of economic or social unrest. In the 1950s, for example, Congress expressed significant concern about whether the Reserve Banks were expending effort to "influenc[e] public opinion" on "controversial matters"—it is likely no coincidence that Congress's concern on that score coincided with the ideological throws of the Cold War.³¹ In 2021, the Ranking Member of the Senate Banking, Housing, and Urban Affairs Committee (Senate Banking Committee) leveled charges of "woke mission creep" in the

THE FED. RSRV. Sys., <u>www.federalreserve.gov/monetarypolicy/fomc.htm</u> (last visited Sep. 29, 2022).

²⁸ See, e.g., Press Release, Fin. Servs. Pol'y Comm. of the Fed. Rsrv. Sys., Federal Reserve Studies Confirm Electronic Payments Exceed Check Payments for the First Time, federalreserve.gov/boarddocs/press/other/2004/20041206/ (Dec. 6, 2004) (describing policy choice following "A Committee of the Conference of Presidents.").

²⁹ Bd. of Governors of the Fed. Rsrv. Sys., The Fed Explained: What the Central Bank Does 28 (2021) ("During the FOMC meeting, policymakers . . . review reports from the Federal Reserve staff and other sources.").

³⁰ See infra Part II.A (discussing how the governance arrangements of the Federal Reserve Act establish conduits of knowledge and information from the regional reserve banks to the Board, so that Board policy does account for regional interests).

³¹ Joint Comm. on the Econ. Report, Subcomm. On Gen. Credit Control and Debt Mgmt., 82d Cong., Questions on General Credit Control and Debt Management 11 (1951) [hereinafter Patman Hearing Questionnaire] ("List and discuss any expenses which have been incurred during the period since 1946 by the Board of Governors, or, to the Board's knowledge, have been incurred by the Federal Reserve banks for the purpose of influencing public opinion on controversial matters.").

research function of the Reserve Banks,³² focusing in particular on efforts at the Banks of San Francisco,³³ Atlanta,³⁴ Boston,³⁵ and Minneapolis³⁶ to publish material on climate change, racial inequality, and income inequality.

To be sure, the capacity in which the Reserve Banks' research influences internal actors at the Fed Board or onlookers outside is quite fuzzy. At a passing glance, the Reserve Banks appear to carry the imprimatur of the central bank, insofar as they are full-fledged entities within the Federal Reserve System. But in actuality, the Reserve Banks are not government agencies, as is the Board.³⁷ Rather, the Reserve Banks are corporations, whose stock is held by their member banks—they are private institutions albeit serving public aims.³⁸ As such, the Reserve Banks are not subject to the full rigors of transparency and accountability imposed under various federal statutes.³⁹

(May 24, 2021)

banking.senate.gov/newsroom/minority/toomey-expands-review-of-woke-m ission-creep-by-regional-federal-reserve-banks ("[The] Fed has recently been engaging in mission creep, devoting federal resources to political advocacy.").

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³² Press Release, U.S. Senate Comm. on Banking, Housing, & Urban Affs., Toomey Expands Review of Woke Mission Creep by Regional Federal Reserve Banks

³³ Letter from Sen. Pat Toomey, Senate Comm. on Banking, Housing, & Urban Affs., to Mary Daly, President and Chief Executive Officer, Federal Reserve Bank of San Francisco (Mar. 29, 2021) (discussing the publication of climate change material with the president at Federal Reserve Bank of San Francisco).

³⁴ Letter from Sen. Pat Toomey, Senate Comm. on Banking, Housing, & Urban Affs., to Raphael Bostic, President and Chief Executive Officer, Federal Reserve Bank of Atlanta (May 23, 2021).

³⁵ Letter from Sen. Pat Toomey, Senate Comm. on Banking, Housing, & Urban Affs., to Eric Rosengren, President and Chief Executive Officer, Federal Reserve Bank of Boston (May 23, 2021).

³⁶ Letter from Sen. Pat Toomey, Senate Comm. on Banking, Housing, & Urban Affs., to Neel Kashkari, President and Chief Executive Officer, Federal Reserve Bank of Minneapolis (May 23, 2021).

³⁷ See, e.g., United States ex rel. Kraus v. Wells Fargo & Co., 943 F.3d 588, 597–604 (2d Cir. 2019) ("The Board ... is an agency of the United States . .

^{. .} The FRBs are not . . . department or agency.").

³⁸ See id.

³⁹ Administrative Procedure Act, Pub. L. No. 79-404, 60 Stat. 237 (1946).

The ambiguous authority of the Reserve Banks' research function may ultimately be unhelpful for the System overall. Lax oversight and minimal accountability may provide a weak check against a research function that veers toward issues that sit outside the mandate of the Fed Board. Depending on the tone or message, such digressions could tarnish other Reserve Banks' research functions, undermining the integrity of the Fed's research initiatives overall. Moreover, the ambiguous basis of authority for the research function might suggest that the Banks' research findings have more influence on policy than they actually do, stoking concern or criticism that blocks productive debate.⁴⁰

This Article not only draws attention to the understudied research function but also, in doing so, sheds light on these unanswered questions: What law governs the Reserve Banks' research function? What holds Reserve Banks accountable to Congress? And, ultimately, what are the consequences of a research function that departs from the Board's policy norms?

To meaningfully answer those questions, in Part II, this Article reviews primary source documents to understand the historical evolution of the research function. It discovers that the trajectory and importance of the research function was discussed internally at the Fed—quite robustly—between the Fed's founding and the 1950s. During those years, the Reserve Banks' research was governed primarily by internal Fed policy rather than formal law. Thereafter, the research function responded to developments in 1970s-era legislation, namely the Community Reinvestment Act (CRA).⁴¹ The CRA appears to have motivated an expanded view of what could properly fall under the research function and the newly minted, but parallel, "community development" functions.⁴²

However, there is an absence of primary source documents available to the public that reveal the Fed's current policy on

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⁴⁰ See Skinner, supra note 2, at 247 ("Activism undermines the legitimacy of central bank authority, erodes its political independence, and ultimately renders a weaker central bank.").

⁴¹ Pub. Law No. 95-128, 91 Stat. 111 (1977) (codified as amended at 42 U.S.C. § 5301).

⁴² See Federal Reserve Community Development Resources, Bd. of Governors of the Fed. Rsrv. Sys., federalreserve.gov/consumerscommunities/comm-dev-system-map.htm (last accessed Aug. 2, 2021) (featuring the community development websites from the twelve Reserve Banks and headlining them as "Fed Communities: Where Ideas Take Root").

research.⁴³ Accordingly, to understand how the modern Reserve Banks deploy their research functions, the Article turns in Part III to economics methodologies: it hand collects, codes, and assesses nearly 5,000 working papers published across the twelve regional Reserve Banks between 2006 and the present—thus covering the chairmanships of Ben Bernanke, Janet Yellen, and (part of) Jerome Powell. Notably, these Chairs were appointed by Presidents of differing political parties.⁴⁴ The goal here is to discern the nature of research undertaken, against charges that the Reserve Banks' research functions have departed from their historic mean.

We find that, overall, a larger share of the Reserve Banks' research output now touches on topics that could be described as "activist," such as inequality, race, gender, and climate. All of the Reserve Banks are producing more research in these areas in recent years than in the past, but the trend is far more pronounced for some Banks than for others, which has the potential to politicize the System.

Part IV concludes with a normative examination of the role of the Reserve Banks in the Federal Reserve System. While at least one scholar has characterized the Reserve Banks as "vestigial institutions," urging "serious problems with the ongoing participation of the Reserve Banks on both the policy and constitutional levels," we would prefer to keep the federalist structure intact, preserving the ability of the Reserve Banks to leverage their regional insights into research that engages the public, counteracts group think in the System, and provides local counterweights to centralized decision

⁴³ See, e.g., Supervisory Policy and Guidance Topics, Bd. Of Governors of The Fed. Rsrv. Sys., www.federalreserve.gov/supervisionreg/topics/topics.htm (last visited Sept. 13, 2022) (highlighting how there is an absence of primary documents discussing the Fed's policy on its contemporary research functions).

⁴⁴ See Reuters Staff, Factbox: Past Federal Reserve chiefs and who appointed them, Reuters (Feb. 22, 2021), reuters.com/article/us-usa-fed-chairs-factbox/factbox-past-federal-reserve-c hiefs-and-who-appointed-them-idUSKBN2AM11Z ("Bernanke, who crafted the Fed's response to the 2007–2009 recession and financial crisis and established a game plan still largely in use today, was appointed by George W. Bush and reappointed once by Democrat Barack Obama. . . . Yellen, now U.S. Treasury secretary, was appointed by Obama.").

⁴⁵ Peter Conti-Brown, *The Twelve Federal Reserve Banks: Governance and Accountability in the 21st Century* 14–15 (Rock Ctr. for Corp. Governance, Working Paper Series No. 203, 2015).

making at the Board. However, we ultimately urge clearer lines of accountability—legally engrained—and policy principles articulated by the Board to ensure that the research function is put to those productive ends rather than politicizing the institution overall.

The importance of a credible, respected, and impartial research function among the twelve regional Reserve Banks cannot be understated—all the more so at times, like today, when the nation confronts economic and social challenges of unprecedented nature. Writing in 1948, the Fed Board wrote spiritedly to the Reserve Bank Presidents impressing upon them the importance of their research:

The dominant place which the Federal Government has come to occupy in the functioning of the economy has made increasingly necessary a widening public knowledge and understanding of national purposes and policies. In a democracy, the best and fundamentally the only way to make wise public measures prevail, and to avoid unwise ones, is to expose them fully and fairly to public scrutiny.⁴⁶

Surely, these words are ever more so true today as they were after World War II. Ultimately, by studying the Reserve Banks' research function in considerable depth—with primary sources and empirical evidence—the Article explains the value of a robust Reserve Bank research function today while drawing attention to its potential to politicize the System if not made more accountable.

II. The Research Function of the Federal Reserve Banks: Law, Politics, and Policy

Although it is one of the longest-standing functions of the U.S. central bank, the Fed's research function has received scant attention in the scholarly literature on the Federal Reserve. Yet the research function is distinct from the other aspects of the Fed. For one, it is the only function that the System performs that is exercised principally by the regional Reserve Banks with little if any control from the Board. Moreover, it is also perhaps the only function the System performs that is not statutorily prescribed—that is, while the Reserve Banks may have the legal discretion to deploy their research functions, they are not required to do so in pursuit of one of the Fed's

⁴⁶ Directors' Responsibilities Memo, *supra* note 24.

statutory goals—i.e., price stability, maximum employment, bank safety and soundness, and (implicitly) financial stability.

This Part tells the untold story of the regional Reserve Banks' research function. It does so by drawing on primary source documents to understand the genesis of the research function, the evolution of its goals, and what (if any) law constrains the Reserve Banks in respect of their research. In broad strokes, the story is one of ever-lessening control by the Board over the Reserve Banks' research, accompanied by an increasing institutional commitment within the Reserve Banks to bespoke areas of specialty and expertise and the growing adherence to principles of neutrality, impartiality, and transparency. As Part III will explore empirically, this trend breaks in some respects in the past few years.

A. Origins of Reserve Bank Research

The story of the Reserve Banks' research function starts with the birth of the Reserve Banks themselves. A brief history of the founding of the Fed, with the Federal Reserve Act of 1913, gives a sense of the fractious political negotiations that led to the creation of a central bank that shared power between a board in Washington, D.C. and various regional districts across America.⁴⁷ In many ways, the various interests that necessitated a federalist central banking system also drove the evolution of the research function throughout the decades, and continue to motivate its experimentation today.

At the turn of the twentieth century, the notion of a central bank was highly controversial.⁴⁸ For some, a central bank seemed to be a national necessity. The nation had experienced several banking crises (one particularly bad in 1907), and there was growing desire to make the U.S. economy more sophisticated relative to European peers that seemed to benefit from their own central banking systems.⁴⁹ Still, some Jacksonian-era sentiment hung in the air, with

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⁴⁷ See id.; see also Richard T. McCulley, Banks and Politics During the Progressive Era 255–91 (2012) (discussing the negotiated positions, and interests, leading up to the passage of the Act).

⁴⁸ For background on the First and Second Banks of the United States, see generally, Jay Cost, The Price of Greatness (2018); Paul Kahan, The Bank War 7 (2016).

⁴⁹ See Gerald T. Dunne, A Christmas Present for the President: A Short History of the Creation of the Federal Reserve System 7–13 (1964).

populist groups still wary of concentrating power over money with government (or, indeed, with the banks themselves).⁵⁰

As such, legislation to create a central bank foundered upon disputes between those that were 'for' versus 'against' a central bank.⁵¹ Even among those that desired a central bank, there were differing views. Some Wall Street (New York) banking interests preferred a concentrated central bank, similar to the European models at the time.⁵² Others from La Salle Street (Chicago and large Midwestern cities) preferred regional decentralization.⁵³ The country banks, meanwhile, feared both Wall Street and La Salle Street dominance and wished to preserve themselves.⁵⁴

Senator Nelson Aldrich's eponymous Aldrich Plan attempted to mediate these interests with the 1912 proposal for a National Reserve Association—a system of fifteen regional central banks—who would be coordinated by a national board of commercial bankers. This "multibranched corporation" would welcome "[a]ll national banks and qualifying state banks" provided they "subscrib[e] a percentage of their capital and, thereafter, be associated in a network of subassociations." These banks would

⁵⁰ A third group, a subgroup of Bryanite Populists even urged that only the federal government had the exclusive constitutional authority to manage the money supply. The 1896 Democratic Party Platform (Bryan was the then-presidential candidate) was "Congress alone has the power to coin and issue money, and President Jackson declared this power could not be delegated to corporations or individuals." *Id.* at 5–6.

⁵¹ ROGER LOWENSTEIN, AMERICA'S BANK: THE EPIC STRUGGLE TO CREATE THE FEDERAL RESERVE 111 (2015) ("Warburg favored a stronger government role than Aldrich did, to assure the public that Wall Street would not be in charge.").

⁵² *Id*.

⁵³ *Id*.

⁵⁴ See Paul M. Warburg, Vol I. The Federal Reserve System: Its Origin and Growth vii—viii (1930) (setting out, from his first-hand perspective, "certain vital facts in the origin and growth of the System" for the "public interest"); see also id. at 55 (discussing these competing interests).

⁵⁵ Aldrich Proposal: National Reserve Association of the United States (1911),

fraser.stlouisfed.org/archival-collection/committee-history-federal-reserve-s ystem-1342/banking-currency-reform-discussions-1906-1913-457611.

⁵⁶ Dunne, *supra* note 48, at 7.

choose forty-two of the forty-six directors; the government would choose the other four.⁵⁷

Yet the Aldrich Plan mixed poorly with the politics of the time. New Progressive groups, led by President Teddy Roosevelt and then Woodrow Wilson, would not support this Old Guard Republican Plan. Separate In search of greater independence, they preferred a system in which Civil Servants, rather than political appointees, controlled monetary affairs. Meanwhile, Virginia Representative Carter Glass advocated agrarian interests in the South and West. These groups, who had been harmed by financial crises in the past century, distrusted banks and thus also threw their support behind a System constrained by robust public sector control.

Ultimately, by borrowing this one key concept from the Aldrich Plan—a central board sharing power with regional branches⁶²—President Wilson and Representative Glass forged a compromise: the "central" banking system would not be central at all.⁶³ Rather, eight to twelve private regional Reserve Banks would make policy alongside the Federal Reserve Board of presidential appointees in Washington, D.C.⁶⁴ This structure appealed to all of the various factions.⁶⁵ With deft political rhetoric, Representative Glass then burnished the legitimacy of the new System by emphasizing its

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⁵⁷ *Id.* ("The banks would choose, directly or otherwise, 42 of the associations' 46 directors, with the remaining four being appointed by the government.").

⁵⁸ *Id.* at 6–7 ("Characteristic of the latent fission in the Democratic Party was the varied response to the proposal.").

⁵⁹ See Gyng-Ho Jeong et al., *Political Compromise and Bureaucratic Structure: The Political Origins of the Federal Reserve System*, 25 J. of L. Econ. & Org. 472, 480 (2009) ("They sought to limit the influence of the large city banks by advocating a central bank that was controlled by their political representative.").

⁶⁰ SARAH BINDER & MARK SPINDEL, THE MYTH OF INDEPENDENCE: How Congress Governs the Federal Reserve 107 (2017) ("As Glass argued on the floor early in 1933, the Treasury secretary had an 'undue influence on the board' and the Treasury had made the Fed 'a doormat of the United States Treasury."").

⁶¹ See id. at 53–54 ("Reflecting Jeffersonian distrust of the banking industry and concentrated national power more generally, the impact of Jackson's veto was remarkably enduring.").

⁶² WARBURG, *supra* note 53, at 178–406.

⁶³ Jeong et al., *supra* note 58, at 480.

⁶⁴ Id. at 481–82.

⁶⁵ *Id*.

federalist structure: that the new Federal Reserve System "is modeled upon our federal political system The regional banks are the states and the Federal Reserve Board is the Congress." 66

The original Federal Reserve Act did not directly establish or authorized a research function for the System, though it implied one.⁶⁷ For the Board, section 11(1) would provide open-ended authority "To employ such attorneys, experts, assistants, clerks, or other employees as may be deemed necessary to conduct the business of the board."68 The basis for Reserve Banks research was even more broadly worded. Section 4(4) of the Act lists out the general corporate powers of each Reserve Bank as a corporate"—section 4(6) would, in turn, include the ability "[t]o appoint by its board of directors, such officers and employees as are not otherwise provided for in this Act," and section 4(7) would allow the Reserve Banks to "exercise by its board of directors, or duly authorized officers or agents, all powers specifically granted by the provisions of this Act and such incidental powers as shall be necessary to carry on the business of banking within the limitations prescribed by this Act."69 Presumably, these "incidental powers" provided the authority for the Reserve Banks' research functions at the Fed's founding (and continue to do so today).⁷⁰

The Federal Reserve Act also provided indirect authority for the research function via the governance structure it set out.⁷¹ The original Act stated that one of the Class C directors would serve as Chairman of the Board and, in that capacity, act as the "federal reserve agent."⁷² The Agent/Chairman was required to "make regular reports to the Board of Governors of the Federal Reserve System and

⁶⁶ Carter Glass, An Adventure in Constructive Finance 173–74 (Doubleday, Page, & Co. ed., 1927).

⁶⁷ Federal Reserve Act, Pub. Law No. 63-43, § 11(*l*), 38 Stat. 251, 262–63 (Original).

⁶⁸ *Id*.

⁶⁹ Federal Reserve Act § 4(6) (emphasis added).

⁷⁰ *Id.* A key case to note here is NationsBank of N.C. v. Variable Annuity Life Ins. Co., 513 U.S. 251, 256 (1995). It applies *Chevron* to the OCC's construction of national bank incidental powers. The incidental powers clause of the National Bank Act is close to—but not quite the same as—that of the Federal Reserve Act. So it is not at all unreasonable to assume that *VALIC* also applies to Federal Reserve banks.

⁷¹ Federal Reserve Act § 4(6).

⁷² See Federal Reserve Act § 4(20).

shall act as its official representative for the performance of the functions conferred upon it by this Act."73

Against this backdrop, and upon this rather open-ended authority, the research function of the Reserve Banks was established very shortly after the System's founding. As the following Sections will show, a series of geopolitical and domestic events pushed the research functions to gradually play a role that became larger than any contemplated by the Federal Reserve Act's framers.

B. Research Function Expansion

To evolve apace of any legislative changes, internal Fed policy shaped the role that the Reserve Banks' research function would play within the System for its first fifty years. Between 1914 and 1951, the Board gradually loosened its policy control over the Reserve Banks' research function, albeit with some anxiety about the potential for controversy stemming from it. In parallel, as the Reserve Banks' institutional confidence and pride in their research functions grew, so too did their desire for more autonomy to experiment.

1. 1914–1919: Board Control

The research function first developed at the Board and in the Reserve Banks for the narrow purposes of data collection, processing, and reporting. In these early years, the Board used legal authority in the Federal Reserve Act to retain control of the Reserve Banks' research functions. Specifically, the original section 4(20) of the Federal Reserve Act gave the Board authority to select the three Class C directors (Class A and Class B would also have three directors each).74 As mentioned above, the Board was required to then designate one of these Class C directors as the Chairman and Federal Reserve "Agent." The Agent would be the Board's ambassador to the Reserve Banks; "the person at the bank through

⁷⁴ Federal Reserve Act § 4 (stating that Class C will consist of three directors selected by the Federal Reserve Board). ⁷⁵ *Id*.

whom the Federal Reserve Board deals." Specifically, the Agent:

shall be required to maintain, under regulations to be established by the Federal Reserve Board, a local office of said board on the premises of the Federal reserve bank. He shall make regular reports to the Federal Reserve Board and shall act as its official representative for the performance of the functions conferred upon it by this Act.⁷⁷

The Federal Reserve Act doubly confirmed the Board's authority to get information from the Reserve Banks in section 11(a). That provision gave the Board authority "[t]o examine at its discretion the accounts, books, and affairs of each Federal reserve bank and of each member bank and to require such statements and reports as it may deem necessary."⁷⁸

In 1914, the Board formed its Division of Statistics, based in New York City. (It relocated to Washington, D.C. in 1915, and was renamed the Division of Reports and Statistics. (Bo) In line with the Board's priorities for data and reporting at the time, the work of the Reports and Statistics personnel appears to have been limited to the collection of business and financial conditions data. The Board encouraged its Agents to establish a "research" department at each Reserve Bank, largely, it would seem, to support the Board's efforts in building its own research capacity. It appears that the Board contemplated that the Reserve Banks' new research arms could feed

⁷⁶ Banking Act of 1935: Hearings on H.R. 5357 Before the H. Comm. on Banking and Currency, 74th Cong. 307 (1935) (statement of Marriner Eccles, Chairman, Federal Reserve [hereinafter Eccles statement].

⁷⁷ Federal Reserve Act § 4.

⁷⁸ Federal Reserve Act § 11(a).

⁷⁹ 5 FED. RSRV. BD. ANN. REP. 63 (1918) (requiring that the work of the statistical division needed supplementation).

⁸⁰ *Id.* at 62 ("[a]t the time of its organization, the Board created a Division of Reports and Statistics[.]").

⁸¹ *Id.* at 474–75 (providing a list of economic and financial indices research departments around the System complied from 1914 through the early 1920s, including, for example, commodity wholesale price index, index of industrial production, retail trade index, and index of department sales and inventories).

⁸² FED. RSRV. BD., *supra* note 78, at 63 (suggesting that the Board needed assistance in its scientific research).

information into the new Reports and Statistics unit via the office of the Agent.⁸³

The Board's 1915 Annual Report provides three examples of how the Reserve Banks would support the Board's own research. In Boston, "[In the First District] the Federal Reserve Agent has had charge of the credit department and statistical work[.]" In Philadelphia, under the heading of "Work of the Office of the Federal Reserve Agent," the Board requested the "[p]reparation of various kinds of statistical and analytical reports and many other miscellaneous duties in connection with both the operation of this office and the operation of the bank." Finally, in St. Louis, under the heading of "Statistics," "[a]n effort has been made by the Federal Reserve Agent to collect reliable information regarding business conditions in this district."

During this time, the Board held the reins tightly. As one 1965 historical reflection recounted:

In order to help coordinate and promote a [s]ystem-wide program, occasional conferences were held which included representatives of the research staffs of the Board and the Banks. Members of the

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^{83 &}quot;At the time of its organization, the Board created a Division of Reports and Statistics, which has collected and tabulated information from all available sources relating to economic and financial questions . . . [But] due to the constantly increasing volume of business of the Federal Reserve Banks, this division has necessarily been more and more occupied in the compilation of figures which relate to the operations of the Federal Reserve Banks rather than to banking questions in general." Id. at 62-63. In 1918, the Board would found the Division of Analysis and Research, to take on broader research than the Division of Reports and Statistics. Id. (finding that it was necessary to supplement the work of the statistical division). In 1919, the Board created the Office of the Statistician, and in 1923, "the division of analysis and research and the office of statistician were consolidated into [the] division of research and statistics." 10 FeD. RSRV. BD. ANN. REP. 62–63 (1923). The new division "continu[ed] the task of collecting statistics on production, trade, and banking begun by" the Division of Analysis and Research, William P. Yohe, The Intellectual Milieu at the Federal Reserve Board in the 1920s, 22 Hist. Pol. Econ. 465, 481 (1990).

⁸⁴ 2 Fed. Rsrv. Bd. Ann. Rep. 140 (1915), fraser.stlouisfed.org/title/annual-report-board-governors-federal-reserve-syst em-117/1915-2473.

⁸⁵ Id. at 219.

⁸⁶ *Id.* at 302.

Board's research staff visited the Reserve Banks to become more familiar with their research and statistical work, and in the mid-1920's a member of the Board's research staff was given the special assignment of keeping informed on research activities in the Reserve Banks.⁸⁷

To put a fine point on it, all research personnel at the Reserve Banks were employees of the Board and served at its pleasure.⁸⁸

In summary, although the Reserve Banks were actively engaged in building out their research functions from the early years of the System, their efforts were in service to the Board and subsumed within the Board's purview as attached to the office of the Agent. The Board kept a watchful eye. 89 This relationship may, however, have been an uneasy one, at least for some Reserve Banks. As the then-President of the New York Reserve Bank, Benjamin Strong, would explain in 1921:

The Bank, however, from the very beginning took the position that the Research Department was, in fact, "a composition of at least two departments of the bank," one of which performs "work which is distinctly work for the bank quite independent of the Federal Reserve Agent's department" and which includes "reports made for the officers of the bank and all research work."

Notably, the memoranda written by the New York Federal Reserve Banks' research departments between 1914 and 1917 were

⁸⁷ CLAY J. ANDERSON, A HALF CENTURY OF FEDERAL RESERVE POLICYMAKING 1914-1964, at 39 (1965), https://fraser.stlouisfed.org/title/a-half-century-federal-reserve-policymaking -1914-1964-3602.

⁸⁸ George Garvy, *Carl Snyder, Pioneer Economic Statistician and Monetarist*, 10 Hist. Pol. Econ. 454, 458 n.12 (1978) (noting that prior to the Federal Reserve Act of 1935, banks examinations and research on credit and business conditions for the Federal Reserve board were handled by organizations within the Reserve Bank, overseen by the Reserve Agent and a separate group of officers).

⁸⁹ *Id.* (highlighting that at least some researchers and other employees were supervised directly by the Reserve Agent).

⁹⁰ *Id.* (quoting a memo from Strong to Harding, dated 14 Sept. 1921).

mostly addressed to the Federal Reserve Agent; thereafter, they were mostly addressed to Benjamin Strong—foreshadowing the tug-of-war between the Board and the Reserve Banks that would characterize the following decade.⁹¹

2. 1920–1933: The Battle of Experts

In the early 1920s, the Board viewed research as the medium through which the public would form its views about the System's purpose and goals. So long as the Reserve Banks' research had hewed closely to the Board's prerogatives, as it did in the period prior, the Board could control that message. But, as some Reserve Banks (like New York) began to experiment with new policy tools and goals, the Board went to considerable lengths to rein in the research that departed from the house view at the Board.

⁹¹ *Id.* at 468 ("In the first couple of years after joining the Bank, Snyder's analytical and policy-related memoranda were addressed to Chairman Jay (the relationship between Jay and Governor Strong having been quite strained), but beginning with the fall of 1922 they were almost exclusively directed to Strong"); *see also id.* at 469 n.38 ("Memorandum, Snyder to Strong, 13 Feb. 1923"), 469 n.40 ("Memorandum to Strong, 2 March 1927").

⁹² See, e.g., id. at 463 ("Interest in comprehensive empirical economic data became widespread in the early twenties, in part as a result of the war, and individuals with a variety of backgrounds tried to meet the demand for the data . . . Most of Snyder's statistical work was published in professional journals"); see also Anderson, supra note 104, at 40 n.3 ("A secondary use of material developed in the research program was publication of a national summary of business conditions prepared by the Board's staff, and monthly reviews prepared by the Reserve Banks The purposes of these publications were frequently discussed at meetings of System officials.").

⁹³ See id. at 472–73 ("Board criticism of the amount of time Snyder was devoting to basic research can be traced to 1923. . . . Since the Agent's function was under the Board's direct supervision, the Board felt that it should exercise close control over the substance and form of an individual Bank's research work."); see also Anderson, supra note 86, at 40 n.3 ("Some were vigorously opposed to any attempt to explain current Federal Reserve policy on the basis that 'too many spokesmen' would lead to confusion.").

⁹⁴ See id. at 472 ("The Federal Reserve Board approved on 28 December 1926 a resolution . . . 'to eliminate' Snyder's salary from the Federal Reserve Agent's budget for 1928, because the focus of the research work within the System should be related exclusively to credit problems and 'to

In the first part of the decade, the stage had been set for monetary policy experimentation. ⁹⁵ World War I drastically changed the role of the United States and its central bank in the international monetary system. ⁹⁶ The War brought about the end of the classical gold standard era, which had made convertibility of gold to fiat currency the primary goal of monetary policy and thus automatically prompted central banks to raise interest rates during periods of gold outflow, and conversely to lower interest rates when gold flowed into the country. ⁹⁷ By the time the gold standard was readopted after the War, central banks and the public had begun to learn that monetary policy could also be used to manage domestic conditions, such as employment; thus, pressure to prioritize domestic goals could come into tension with a commitment to maintaining convertibility. ⁹⁸

The War also caused major disruptions in European financial markets, giving room for US banks to play a larger international

organizing series on business.""); *see also* Hetzel, *infra* note 136, at 4–5 (highlighting examples of control exercised by the Board over the Reserve Bank of New York).

⁹⁵ See id. at 459–60 (noting that in the early the 1920's, Snyder was "developing several new economic time series to identify and test statistically basic economic relationships.").

⁹⁶ See Leland Crabbe, *The International Gold Standard and U.S. Monetary Policy from World War I to the New Deal*, FED. RSRV. BULL., June 1989, at 426 ("After the war, Britain retained its status as a central creditor nation; but by 1920, British foreign assets had fallen to one-fourth of their 1914 level, while more than \$11 billion in capital exports during the war had transformed the United States from a debtor into a creditor nation.").

⁹⁷ Under the gold standard, central banks attempted to maintain the convertibility of their fiat currency to gold at a fixed price; this implied fixed exchange rates between participating countries. Adjustments of the discount rate served to manage gold flows. *See id.*; Robert Dimand explains that the political compromise that led to the Federal Reserve Act "produced an awkward combination of the gold standard's monetary discipline with central bank management of an elastic currency accommodating the needs of trade." Robert W. Dimand, *Competing Visions for the U.S. Monetary System, 1907-1913: The Quest for an Elastic Currency and the Rejection of Fisher's Compensated Dollar Rule for Price Stability, 45 Papers IN Pol. Econ. 101, 102 (2003).*

⁹⁸ See Barry Eichengreen, Golden Fetters: The Gold Standard and the Great Depression, 1919-1939, at 391 (1996) (discussing the shift in reliance on "the credibility of the commitment to gold" partly forced by the working class who pressured policymakers to improve domestic monetary policy, specifically addressing employment).

role.⁹⁹ The Reserve Banks held large gold reserves and could supply credit to member banks that came to the discount window.¹⁰⁰ Reserve Banks set their discount rates individually, but were subject to Board approval.¹⁰¹ Reserve Banks were also permitted to buy and sell government securities in the open market, but it was not until the 1920s that Fed leaders, including Benjamin Strong of the New York Fed, began to realize that these "open market operations" could be used in pursuit of macroeconomic stabilization.¹⁰² As open market operations began, with no precedent before them, the research function at the Reserve Bank provided the critical support.¹⁰³ Strong himself was a highly academic central banker, keen to expand the research function in support of policy innovation.¹⁰⁴

⁹⁹ See David C. Wheelock, The Fed's Formative Years, 1913-1929, FED. RSRV. HIST. (Nov. 22, 2013), federalreservehistory.org/essays/feds-formative-years ("War disrupted European financial markets and reduced the supply of trade credit offered by European banks, providing US banks with an opening.").

¹⁰⁰ See id. ("The Federal Reserve Banks held substantial gold reserves and discount loans to their member banks.").

¹⁰¹ See id. ("Although each Reserve Bank set a discount rate, subject to Federal Reserve Board approval, Federal Reserve credit was supplied at the initiative of member banks when they came to the discount winder to borrow reserves or obtain currency.").

W. Randolph Burgess, *Reflections on the Early Development of Open Market Policy*, Fed. Res. Bank of N.Y. Monthly Rev., Nov. 1964, at 219, 220 ("During World War I member banks borrowed heavily from the Federal Reserve Banks, and the interest from these loans brought the Reserve Banks substantial earnings. But, due to the deflation of credit in 1921, a substantial return flow of currency, and heavy receipts of gold from abroad, the banks were then able to pay off a large part of their borrowings. Hence the Reserve Banks found their income cut to a point where they had difficulty in meeting their current expenses. So a number of the Reserve Banks went into the market in 1922 and bought Government securities to eke out their earnings.").

¹⁰³ *Id.* at 221 ("Governor Strong and other officers of the Bank used our [office for research and analysis] to help them with operating problems.").

¹⁰⁴ *Id.* ("[Strong's] inquiring mind sought out the facts—and theories—bearing on the problem he was trying to solve. He read widely, and loved to match wits with professors of economics[.]"). Together with Winfred Riefler, a research economist at Board, and W. Randolph Burgess, a research economist at New York Reserve Bank, to develop the Riefler-Burgess doctrine—which gauged the optimal level of interest rates in view of the level of member banks' borrowing from the Federal Reserve Banks and the amount of their open market operations. Allan H. Meltzer,

But Strong's initiatives to conduct an active monetary policy clashed with Board members' views, and in particular those of Adolph Miller, who adhered to the so-called Real Bills doctrine. ¹⁰⁵ Indeed, the clash of views—varying degrees of adherence to the Real Bills doctrine across districts—was reflected in different policy responses to the banking panics of the late 1920s across the districts, resulting in vastly different outcomes. ¹⁰⁶ Research became a flashpoint between the Board and the New York Fed through the 1920s and the Board went to considerable lengths to win. ¹⁰⁷

For one, the Board instituted a System-wide policy for "Principles Governing Research, Statistical, and Publications" that gave itself significant authority over the Reserve Banks' research budgets and the right to review its publications. The 1924 version of this policy explains that the "Scope and Purpose"

of the work of the research and statistical divisions of the Federal reserve banks and the Board is to

A HISTORY OF THE FEDERAL RESERVE: 1913–1951, at 138, 162, 193 (2003) (discussing, respectively, an explanation of the doctrine, an emphasis on open market operations, and for Strong's role in developing it). *See also* Mark Toma, Monetary Policy and the Onset of the Great Depression 65–81 (2013) (discussing the doctrine).

¹⁰⁵ See infra notes 119–122 (supporting further the contention that Miller and Strong disagreed over the function research served for the Federal Reserve and which policy—Real Bills or Open Market Operations—better served the Fed's goals).

¹⁰⁶ See Gary Richardson & William Troost, Monetary Intervention Mitigated Banking Panics during the Great Depression: Quasi-Experimental Evidence from a Federal Reserve District Border, 1929–1933, 117 J. Pol. Econ. 1031, 1068–71 (2009) (examining the difference in Real Bills Doctrine adherence in the Federal Reserve banks of Mississippi and Atlanta, the outcomes of the banking panics in those districts and generalizing to other districts based on adherence level).

¹⁰⁷ See Burgess, supra note 101, at 221 (discussing a "clash" between the Board and the Banks over using open market operations to enact policy); see also Letter from Walter L. Eddy, Sec'y, Fed. Rsrv. Bd., on Revised Principles Governing Research, Statistical and Publication Activities to all Fed. Rsrv. Agents (Dec. 3, 1924), https://fraser.stlouisfed.org/archival-collection/mimeograph-letters-statemen ts-board-4957/letter-secretary-eddy-re-revised-principles-governing-researc h-statistical-publication-activities-502331 (showcasing new restrictions from the Board on the Banks' publication of their research).

¹⁰⁸ Letter from Walter L. Eddy, *supra* note 106.

collect and digest information bearing on the problems with which the Federal Reserve System is concerned, either as a matter of current operation or as the basis of Federal Reserve policies. All such work is to be under the general supervision of the Federal Reserve Board acting through its Division of Research and Statistics. While research studies and scientific investigations may be undertaken on the initiative of the Federal reserve banks . . . the Federal reserve banks, before any expense is incurred for their prosecution, are to secure the approval of the Federal Reserve Board.

. . .

In terms of publications, monthly reviews published by the Federal Reserve Agents are to be under the general editorial supervision of the Director of Research and Statistics of the Federal Reserve Board, who is responsible to the Board for the proper conduct of the research, statistical, and publication activities undertaken by the Board and authorized for the several banks.¹⁰⁹

In 1926, the Board issued a similar policy; "Revised Principles Governing Research, Statistical and Publication Activities." Again, this policy document made clear the Board's desire to retain control over the messaging of the Reserve Banks' research.

It has recently come to the attention of the Federal Reserve Board that one or two of the Federal reserve banks have prepared for general distribution printed pamphlets descriptive of the operations of the

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¹⁰⁹ *Id*.

¹¹⁰ Letter from Walter L. Eddy, Sec'y, Bd. of Governors of the Fed. Rsrv. Sys., on Revised Principles Governing Research, Statistical and Publication Activities (Apr. 11, 1926), https://fraser.stlouisfed.org/archival-collection/mimeograph-letters-statemen ts-board-4957/letter-secretary-eddy-re-revised-principles-governing-researc h-statistical-publication-activities-502872 (stating that purpose of research and statistical work is to acquire information related to issues that the Federal Reserve is currently confronting, and thus is all under the Board's supervision).

Federal Reserve System and other educational material without previously submitting the text to the Board for approval.

The Board believes that all publications of the Federal reserve banks dealing with matters of more than local interest and all educational material should be submitted to it prior to publication and should receive its approval before being issued to the public. 111

The Board also attempted to modulate the substance of research by exercising its ability to remove research personnel that expressed views inconsistent with the Board. 112

Carl Snyder was the general statistician of the New York Fed. 113 His work on business cycles, the empirical verification of equation of exchange, and monetarism generally positioned him as the "father' of what would become monetarist economic thinking." Snyder expressed views that the Fed should adopt new goals and tools like price-level stabilization and an "even-credit-growth rule."114 At that time, the Fed Board maintained that it had no direct influence over the price level (even though it did in fact control the money supply).115

The Board attempted to fire Snyder, on the ground that his research was not a "productive" use of Fed resources. 116 In a

¹¹¹ *Id*.

¹¹² See George Garvy, supra note 87, at 454 (describing Snyder's depiction of removal from the office as politically and research focus motivated).

¹¹³ *Id.* (describing his work in the development of economic statistics in the 1920's "pioneering").

¹¹⁴ *Id.* at 468. Snyder estimated that the normal rate of growth of trade in the United States was about 4 percent per year, so he argued that "the highest attainable degree of general industrial and economic stability will be gained by an expansion of currency and credit . . . at this rate . . . [4 per cent]. . . . " Carl Snyder, The Problem of Monetary and Economic Stability, 49 Q. J. Econ. 173, 198 (1935).

¹¹⁵ Garvy, supra note 87, at 468–469, 479 (noting that the Board viewed price control as "not our job," and potential "criminal suicide," while Snyder considered the money supply policies after the 1929 crash as a further threat to the economy).

¹¹⁶ Bd. of Governors of the Fed. Rsrv. Sys., Meeting Minutes 529, 534 (1926),

December 1926 memorandum, the Acting Director of the Board's Division of Research and Statistics recommended "that the New York bank should be advised that its present work in long time trends, production and trade should be either discontinued or greatly curtailed;" this referred "to the work being done by Mr. Carl Snyder." At the same time, the Board was opposing a bill in Congress that had been supported by monetarists like Snyder that would have given the Fed a price stability mandate. 118

A third example of Board exertion of control over the Reserve Banks' research is Adolph Miller's testimony in Representative James Strong's 1926 Fed hearing, in which Miller and Benjamin Strong were asked about their views on optimal monetary policy. Miller would defend the viability of the Real Bills doctrine while Strong would urge the efficacy of open market operations as a means of targeting the price level. Price level.

Miller must have felt threatened by the New York Fed's research function, because he tried to discredit the academic basis for

https://fraser.stlouisfed.org/title/minutes-board-governors-federal-reserve-sy stem-821/meeting-minutes-december-28-1926-11-00-25584.

¹¹⁸See, e.g., 69 Cong. Rec. 4302-03 (daily ed. Feb. 20, 1926), https://www.congress.gov/bound-congressional-record/1926/02/20/house-section?q=%7B%22search%22%3A%5B%22h.r.7895%22%5D%7D&s=5&r

■1 ("For now the sixth year a crisis has existed for the faming population . . . Why should we not seek to stabilize the general price level for the good of all . . . ?"); Stabilization: Hearing on H.R. 7895 Before the H. Comm. on Banking and Currency, 69th Cong. 633, 767 (1927) (statement of Walter W. Stewart, former director of the Division of Research and Statistics of the Federal Reserve Board).

https://fraser.stlouisfed.org/title/stabilization-108/part-ii-1272 ("Any attempt to extend the responsibilities of the Federal reserve system to include a wider and more difficult field, such as attempts at price stabilization, I think the Federal reserve ought not to accept. . .").

¹¹⁹ See Robert L. Hetzel, The Rules Versus Discretion Debate Over Monetary Policy in the 1920s,

FED. RSRV. BANK OF RICH. ECON. REV., Nov./Dec. 1985, at 3, richmondfed.org/publications/research/economic_review/1985/er710601 ("The void created by this collapse stimulated the emergence within the Fed of two new and divergent views over the appropriate role of monetary policy. One view developed at the New York Fed under Governor Benjamin Strong. . . . The alternative view developed at the Federal Reserve Board under Board member Adolph C. Miller").

¹²⁰ *Id.* at 5

Strong's position. When asked whether price stability should be a permanent goal of the Fed, Strong had stated in no uncertain terms that he preferred an approach that focused on stabilizing the price level by controlling the level of bank reserves: "If I were Czar of the Federal Reserve System I'd see that the total of our earning assets did not go much above or below their past year's average, after deducting an amount equally from time to time our total new gold imports." Miller rebuffed this as "scholastic invention" as the output of crackpot ideas:

The Federal reserve system is a pretty big organization. There are many persons in it. We have a considerable number of amateur economists and from my point of view they constitute one of its dangerous elements.

. . .

There are altogether too many in and around it for the good of the system, and there has been some influx into the Federal reserve mind of half-thought-out ideas – notions almost metaphysical in their character. These have penetrated the minds of some of the operators of the Federal reserve system.

. . .

And I venture to say that some of the men whom you have consulted [referring to Strong and his associates, including research staff] do not know what this is all about.¹²³

This tension was not resolved in the 1920s; the Board continued to insist that the New York Fed research personnel were employees of the Federal Reserve Agent's office and thus the Board. It was not until Marriner Eccles joined the Fed's Board that the paradigm shifted.

¹²¹ Lester V. Chandler, Benjamin Strong, Central Banker 191 (1958).

¹²² Hetzel, supra note 118, at 6.

Hearing on H.R. 11806 Before the H. Comm. on Banking and Currency, 70th Cong. 213 (1928).

3. 1934-1950: Autonomy

In 1934, President Roosevelt appointed Marriner Eccles as Chairman of the Federal Reserve. From the start of his chairmanship, Eccles appeared to have very different views about the Reserve Banks' governance which impacted the research function directly. First, Eccles observed that the Reserve Banks had innovated their governance somewhat, outside the text of the Federal Reserve Act. As will be recalled, the Act required the Board appoint the three Class C directors and choose one of them to act as chairman of the board of directors. He noted that "the intention of the framers" had been for this chairman—who was also the "Agent"—to act as "the principal executive officer of each bank and the law makes him also the official representative of the Federal Reserve Board at the bank."124 In practice, however, Eccles explained that the directors had all begun to "appoint an executive officer for whom they have adopted the title of governor of the Federal Reserve bank, a title that is not mentioned in the law, and that these governors have become the active heads of the Federal Reserve Banks."125

Eccles found that the inefficient "dual organization" by which the Governor of the Reserve Bank competed with the Federal Reserve Agent "creates cleavage and . . . is bad administration." So he proposed to "recognize the existing situation by giving the governor of a Reserve bank a status in the law and to combine his office with that of the chairman of the board of directors." The proposal would "combine the office of governor with that of chairman, making the governor and the chairman a class C director." The Reserve Banks's board of directors would select this governor and chairman, subject to the Fed Board's approval. In essence, then, Eccles wanted to cede the Board's ability to appoint the third Class C director—who would become both Governor and

¹²⁴ Eccles Statement, *supra* note 75, at 181.

¹²⁵ *Id.* As Eccles pointed out, the Federal Reserve Act gave the directors the authority to do this, based on their authority to "select such officers and employees as are necessary to conduct the affairs of the bank." *Id.* at 187.

¹²⁶ *Id.* at 307. By Eccles calculation, having these two offices was inefficient to the tune of \$400,000 per year. *Id.*

¹²⁷ *Id.* at 181.

¹²⁸ Id. at 188.

¹²⁹ *Id.* at 188 ("The board of directors of each Federal Reserve bank will select the governor and the chairman; but this selection must be subject to the approval of the Federal Reserve Board.").

Chairman—to the rest of the Reserve Bank's board; though the Board would retain a veto over that appointment. Eccles did not, however, explicitly state what would happen to the role of "Agent." Presumably, it would have remained subsumed within the Governor/Chairman position as well, but no longer a person that would be chosen by the Board. 130

Congress did not ultimately adopt Eccles' proposal wholesale in the Banking Act of 1935, which revised the Federal Reserve Act in substantial ways. ¹³¹ But it did take to heart Eccles' point about giving the Governor a formal status in law. The Governor would henceforth be called the "President" in revised section 4(5) of the Federal Reserve Act, which established that each Reserve Bank's board of directors has the authority to:

appoint . . . a president, vice presidents, and such officers and employees as are not otherwise provided for in this Act, to define their duties The president shall be the chief executive officer of the bank and shall be appointed by the board of directors, with the approval of the Board of Governors of the Federal Reserve System, for a term of five years. ¹³²

The role of Chairman and Agent remained in the statute, however—perhaps Congress was apprehensive about muddying the details of how Class C directors would be appointed.¹³³

¹³⁰ Then again, Eccles may have had in mind separating the role of Agent from that of Governor/Chairman. In 1936 meeting minutes, it was noted that the Board had at that time considered "requesting legislation" to effect "a separation of the office of Chairman from the position of Federal Reserve Agent." Bd. of Governors of the Fed. Rsrv. Sys., Meeting Minutes (1936), https://fraser.stlouisfed.org/title/minutes-board-governors-federal-reserve-sy stem-821/meeting-minutes-february-29-1936-32425 [http://perma.cc/QX6U-5MVB].

¹³¹ See generally Banking Act of 1935, Pub. L. No. 305-74 (Aug. 23, 1935), https://fraser.stlouisfed.org/title/banking-act-1935-983 (reflecting that language of law differed from Eccles's proposed language).

Banking Act of 1935, Pub. L. No. 305-74, at 22–23 (Aug. 23, 1935), available at https://fraser.stlouisfed.org/title/banking-act-1935-983 [http://perma.cc/72SL-TVXF].

¹³³ Eccles Statement, *supra* note 75, at 355–61.

Despite the lack of clarity in Eccles' proposal to Congress regarding the Agent role, he must have had strong views on it. In 1936, six months after the Banking Act was passed, Eccles reformed the role of the Agent via policy revisions to "organization and personnel questions of the Federal reserve banks." A major focus of these 1936 personnel and organization changes involved the office of the Agent. In the Board's view, it would be easier to attract highly-qualified, esteemed members of the community to the Chairman role if the job did not also involve the statutorily required—but administrative and mundane—tasks of "issu[ing] . . . Federal Reserve notes and . . . holding collateral security." 135

Accordingly, in February 1936, the Board moved toward making the role of Chairman and Agent "honorary," such that any duty not prescribed in law would be transferred to the general auspices of the President of the Reserve Bank. In line with that idea, the Board continued to examine "the distribution of duties between the Federal Reserve banks and the Federal reserve agents." A March 1936 memorandum requested the Presidents of each Reserve Bank to "institute promptly a thorough survey of the organizations and salary payments of their respective Federal Reserve banks" again, with the aim of removing any duties that were not statutorily required from the Chairman and Agent's role.

This would include, as it were, research. Nowhere did the Federal Reserve Act require that the Agent be responsible for research, and the Eccles Fed apparently abandoned any notion that section 11(*I*) of the Act required that any research personnel must be employees of the Board. Rather, research was an implied function of the regular reporting responsibility outlined in section 4. All twelve Reserve Banks accepted that the research function would be

https://fraser.stlouisfed.org/title/minutes-board-governors-federal-reserve-system-821/meeting-minutes-february-29-1936-32425 [http://perma.cc/QX6U-5MVB].

BD. OF GOVERNORS OF THE FED. RSRV. SYS., MEETING MINUTES 12 (1936), https://fraser.stlouisfed.org/title/minutes-board-governors-federal-reserve-sy stem-821/meeting-minutes-march-25-1936-28404.

¹³⁶ Bd. of Governor of the Fed. Rsrv. Sys., *supra* note 129, at 8.

¹³⁷ Supervisory Policy and Guidance Topics, supra note 43, at 12.

¹³⁸ *Id.* at 12.

¹³⁹ See Federal Reserve Act, Pub. L. 63-43, 38 Stat. 251 (1913) (describing duties of the Agent).

¹⁴⁰ *Id.* § 4(20).

transferred from the Agent (and, as such, Board control) to the general auspices of the Reserve Banks' Presidents.¹⁴¹

Accordingly, meeting minutes from September 8, 1936 laid out "principles to govern the operations of the research and statistical organizations after their transfer from the agent's department to the bank . . . which supersede those transmitted with the Boards letter of August 11, 1926." As perhaps the last publicly available (and clearest ever) articulation of the Board's internal views on the purpose and governance of the Research Function, the document is quoted at length below:

Scope and Purpose: The purpose of the work of the research and statistical divisions of the Federal Reserve banks is to collect and digest information bearing on the problems with which the Federal Reserve System is confronted, either as a matter of current operation or as the basis of Federal Reserve policies.

. . .

Owing to the joint usefulness of these services the Board expects its Division of Research and Statistics to keep in close touch with the activities of similar departments at the Reserve banks, and expects full cooperation in the System's work in this field.

. .

When a new project in the research and statistical field is in contemplation at a Reserve bank it should be worked out in cooperation with the Board's Director of Research and Statistics, except as to

¹⁴¹ See Bd. of Governors of the Fed. Rsrv. Sys., Index to Minutes of Bd. of Governors of the Fed. Rsrv. Sys. 1936, at 157, 165, 168 (1936), https://fraser.stlouisfed.org/title/minutes-board-governors-federal-reserve-system-821/index-minutes-board-governors-federal-reserve-system-1936-281 67 (examples regarding Chicago, Dallas, and Kansas City, respectively); Bd. of Governors of the Fed. Rsrv. Sys., Index to Minutes of Board of Governors of the Federal Reserve. System 1937 (1937), https://fraser.stlouisfed.org/title/minutes-board-governors-federal-reserve-system-821/index-minutes-board-governors-federal-reserve-system-1937-317 83.

¹⁴² Bd. of Governors of the Fed. Rsrv. Sys., Meeting Minutes 3 (1936), https://fraser.stlouisfed.org/title/minutes-board-governors-federal-reserve-sy stem-821/meeting-minutes-september-8-1936-31713.

projects of small scope which involve no considerable expense. From time to time the Director of the Board's Division of Research and Statistics may find it necessary to request the cooperation of one or more Federal Reserve banks on research studies.

<u>Publications</u>: The Board wishes to continue the present practice under which all publications of the Federal Reserve banks dealing with matters of more than local interest are submitted to the Board of Governors and issued only with the approval of the Board.

<u>Budget and Personnel:</u> The budget of the statistical and analytical function should continue to be subject to the advance approval of the Board and all appointments of persons to supervisory positions in the statistical and analytical function should be subject to the approval of the Board. The Board would expect the person in charge of the research and statistical functions to report directly to the President of the bank and not to a Vice President or other officer.¹⁴³

Pursuant to this policy, the Reserve Banks would have autonomy to conduct their research, but the Board would rely on its power to "exercise general supervision" of the Reserve Banks under section 11(*l*) to (1) review and approve or reject publications earmarked for external distribution; (2) review and approve or reject all Reserve Bank research department budgets for the coming year; and (3) review and approve or reject any appointment of officers into supervisory positions with the Reserve Banks research departments. The Board also had authority under Section 11(*f*): "To suspend or remove any officer or director of any Federal reserve bank, the cause of such removal to be forthwith communicated in

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¹⁴³ *Id.* at 3–4.

¹⁴⁴ *Id.* at 3–5 (describing how research work performed by the Reserve Banks is subject to supervision by the Board of Governors); *see also* Federal Reserve Act Pub. L. 63-43, 38 Stat. 251 (1913) (codifying supervision powers under section 11(*l*)).

writing by the Federal Reserve Board to the removed officer or director and to said bank."¹⁴⁵ But that power never seems to have been used to remove personnel from a Reserve Bank research department.

It is worth pausing here to note that the path of research departments bucked the overall flow of power across the System at the time. As originally created, Congress had positioned the regional Reserve Banks as the centers of gravity in the System. But in the Banking Act of 1935, by creating the Board of Governors and the FOMC alongside other legislative changes, Congress purposefully shifted the center of gravity to the Fed's Board. Yet in contrast, as just discussed the research function of the Reserve Banks gained more autonomy from the center in Washington rather than being diluted. Arguably, these events set the conditions and incentives for the expansion of the research function in the decades that followed. Although the Reserve Banks had generally been stripped of their hefty authority, their research function remained as one of these Banks' most significant footprints in the System.

The internal messaging at the Board throughout the next decade of the 1940s was highly positive of Reserve Bank research. It also, in complete contrast to the pre-1936 policy, commended experimentation and autonomy among the Banks. For example, a 1943 "Memorandum of Board Governors Regarding Outside Activities of Board Research Staff" reported on a significant review of "System policy in respect to publications, speeches, and participation in outside activities by members of the System's research staff[.]" The policy underscored "freedom" in the various research departments:

The purpose of research work in the Federal Reserve System is to contribute to the System's effectiveness in serving the public interest in the country as a whole and in the several Federal Reserve districts. To achieve this purpose it is necessary to combine the greatest possible freedom of action on the part of

¹⁴⁵ Id. at 14.

¹⁴⁶ Memorandum from E.A. Goldenweiser on Outside Activities of Board Research Staff to Board of Governors (Dec. 4, 1943), fraser.stlouisfed.org/archival-collection/marriner-s-eccles-papers-1343/mem orandum-board-governors-regarding-outside-activities-board-research-staff-461129.

the various research departments, which would help to attract and retain a competent and vigorous research personnel, with sufficient unity of action to discharge the System's responsibilities as a national institution.¹⁴⁷

It further confirmed that, although the Board would have an opportunity for final review, overall, the "responsibility" for any public statements made by the research department of a Reserve Bank "rests with the President of the Bank as chief executive." ¹⁴⁸

However, it was at this point that the Board first expressed concern about the potential for controversy stemming from Reserve Bank research.

It is the function of the research staffs to furnish background material as a basis for policy action and they must be prepared to express views which may imply or require taking a position on controversial issues. This involves the necessity of guarding against embarrassing the System and of lessening the effectiveness of the Banks' work in research and of the Banks' leadership. In handing controversial questions responsible officials must act so as to avoid placing the System in the position of appearing to be biased advocates.¹⁴⁹

The next section of the memo highlighted a concern for clashes with the government—and the need to establish a chain of accountability concerning messages that might imply the course of System policy.

These considerations should especially be kept in mind on statements dealing with System policy and important issues faced by the Government. On such matters the senior officers of the Bank must be prepared to take the responsibility for statements issued by the research staffs. ¹⁵⁰

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¹⁴⁷ *Id*.

¹⁴⁸ *Id*.

¹⁴⁹ *Id*.

¹⁵⁰ *Id*.

The political-economy of the times provides important context for this statement. In keeping with the post-War spirit, intellectual freedom and thought leadership would likely have been sensed as desirable, patriotic even. Yet, at the same time, the Board was caught in a troublesome relationship with the Treasury, having committed to maintain a favorable interest rate environment to facilitate the government's financing of the war debts. ¹⁵¹ The System messaging on this front would be critical.

In 1948, the Board again issued internal guidance on the research function—this time, in an overview document intended to give newly minted Reserve Bank Presidents a "bird's eye view" of the System—an onboarding document of sorts. ¹⁵² In this memorandum, there was significant emphasis on the value that research could play in informing the public and enlisting the public as allies to the System despite the challenging economic times:

[W]hen System policy decisions have been made, the directors [via their research functions] are able to explain and thereby bring about an understanding and acceptance of them in their various communities. There is a widespread feeling that fiscal and monetary programs and procedure are difficult, if not impossible, for the average individual to understand. However, actions taken by the Government and its central bank in this field are of the utmost importance to the public generally, and it is desirable that an understanding of them be as widespread as possible. ¹⁵³

The guidance memo continued that this manner of communication would be particularly crucial in the coming years, "which will be characterized by a large national debt, a large federal budget, and increased importance of fiscal and monetary policies in

¹⁵¹ See Christina Parajon Skinner, Executive Override of Central Banks: A Comparison of the Legal Frameworks in the United States and the United Kingdom, 108 Geo. L.J. 905, 963 (2018).

¹⁵² Directors' Responsibilities Memo, *supra* note 24, at 7. ¹⁵³ *Id.*

the economic life of the country."¹⁵⁴ Perhaps a lesson to hold onto for today.

A second important message in the memo was that the Reserve Banks should pursue independent, experimental research to the utmost of their ability for the specific purpose of countering overly centralized decision-making or 'group think.' There, the Board recognized the value of robust experimentation among the regional research departments.

There should be no limit to the work of the Federal Reserve Banks in the field of cooperation, education, and leadership. The good that the Banks can do is limited only by the intelligence, courage, and leadership of their directors and officers.

. .

[I]it seems desirable that the Reserve Banks be firmly established as centers of information, enlightenment, and leadership. They must be able to submit comprehensive information wisely interpreted on economic problems and regional trends. They must be able to act as centers for interpretation in their districts of national policy and methods in the fiscal and monetary area. They must be able to assume leadership in times of emergency and to exert proper influence on national policy especially from the point of view of regional considerations. ¹⁵⁶

But just a few short years later, the issue of controversy would surface again in congressional hearings. In these hearings one can see how the Reserve Banks had, by that time, developed tremendous institutional pride in the ethos of their research and were willing to defend their autonomy to experiment.

4. 1949–1952: Patman Hearings

In 1949, a congressional subcommittee of the Joint Committee on the Economic Report undertook a review of fiscal and

155 *Id*.

¹⁵⁴ *Id*.

¹⁵⁶ *Id*.

monetary policy which eventually evolved into a major review of the Federal Reserve—and the research function of the Reserve Banks in particular. 157

Two years into their inquiry, the subcommittee recognized the need for a fundamental re-think about the role and tools of the central bank as "[t]he international situation ha[d] deteriorated markedly, and the United States Government ha[d] embarked on a vast program of military preparedness with its inevitable corollary of increased inflationary pressure." (This, of course, would be a reference to the conflict in Korea. The subcommittee focused on monetary policy in particular, noting that there was consensus on "proper measures of fiscal policy called for by the new situation" but that there was "much disagreement . . . with respect to the proper steps to be taken in the present emergency in the fields of credit policy and debt management."

For the subcommittee, the emergency situation had brought into "sharp focus the question of whether our machinery for the determination of monetary policy . . . [remains] appropriate to cope with the problems of the present day." The Fed was also keen for a holistic review, as Fed Chair William McChesney Martin remarked, "Our present central bank is now nearly 39 years old, and the time has come . . . when we must reevaluate, reassess, and redetermine its worth and effectiveness." The Joint Committee on the Economic Report commissioned a new subcommittee on "General Credit

159 For background on the Fed-Treasury relationship in the Korean War, see Carola Binder & Gillian Brunet, *Expectations and Consumption: Evidence from 1951*, 60 Econ. Inquiry 954 (2021), ("We use rich microdata from the 1951 Survey of Consumer Finances to study inflation expectations and consumption in the United States around the start of the Korean War. . . . We find that durables consumption and total consumption in 1950 increase with expected inflation, while expected consumption in 1951 of durables, cars, and homes decreases (though only statistically significantly for cars).").

 $^{^{157}}$ Patman Hearing Questionnaire, $\it supra$ note 30, at 1.

¹⁵⁸ *Id*

¹⁶⁰ PATMAN HEARING QUESTIONNAIRE, *supra* note 30, at 1.

¹⁶¹ *Id*.

¹⁶² Id. (quoting William McChesney, Chairman, Bd. of Governors of the Fed. Rsrv. Sys., Remarks before the 77th Annual Convention of the American Bankers Association (Oct. 2, 1951), fraser.stlouisfed.org/files/docs/historical/trumanlibrary/pof_090_1951_0019. pdf.

Control and Debt Management" and appointed Texas Representative Wright Patman as its chair. 163

The subcommittee's first order of business was to send a questionnaire to the heads of six federal government agencies, state supervisors of banks, and the Presidents of the twelve regional Reserve Banks. 164 A common question posed to the Treasury, the Board of Governors, the Office of the Comptroller, and the FDIC (with exactly the same wording) focused on research budgets—specifically whether they were used to influence the public of potentially politically sensitive or socially contentious issues.

List and discuss any expenses which have been incurred during the period since 1946 by [insert agency name] for the purpose of influencing public opinion on controversial matters . . . Any expenses during this period for the preparation of motion pictures, illustrated brochures, or any other special material should be included, however, irrespective of your personal opinion as to whether or not the material they contain is controversial in character, in order that the subcommittee may, if it desires, consider them on a case-by-case basis. 165

Why the Subcommittee was laser focused on the swaying of public opinion in the context of a monetary and credit policy review is difficult to know exactly. Jerome Clifford pointed to legitimacy issues associated with the Fed's budgetary independence: without the need to rely on Congress for appropriations, the Board and Reserve Banks have the freedom to decide what policies are "sound" with few checks from the electorate or the government. And research products are the megaphone to broadcast those views. With the ideological battle of the Cold War hanging in the air, Congress might indeed have been worried that without any purse strings to pull, it could lose control over the public's perception of the state of the nation or direction of the national economy. Or Congress might have

164 *Id.* at 2.

¹⁶⁵ *Id.* at 5, 11, 23, 26 (describing review of Treasury, the Board of Governors, OCC, and FDIC, respectively).

¹⁶³ *Id.* at 1–3.

¹⁶⁶ A. Jerome Clifford, The Independence of the Federal Reserve System 36–65 (1965).

been worried about the Fed's internal staff and their motivations for conducting research.

The Board's written reply to this question robustly rejected any insinuation that the Reserve Banks would intentionally stoke controversy or influence public opinion about matters outside the Fed's remit. The response was lengthy and strongly worded. ¹⁶⁷ In the first instance, it defended research generally as key to the democratic legitimacy of the System:

The guiding view of the Board of Governors and the Federal Reserve Banks in reports and information made available to the public is that an adequate and critical public understanding contributes to an intelligent credit and monetary policy designed to foster stable economic progress. Accordingly, the System is actively interested in disseminating factual and explanatory information on general economic conditions and on credit and monetary policies. Such is deemed to be the System's responsibility since the preservation of democratic institutions depends on an informed public opinion. ¹⁶⁸

The Board also underscored the purpose of the research was not to influence public opinion but rather to inform policy with a geographic diversity of views and, in turn, to communicate the expert-basis of its decisions with the public:

A dual purpose is served by the economic studies of the board of Governors and the Federal Reserve Banks. They guide the System in the formulation and administration of credit and monetary policy, which requires a welding of national and regional considerations, as revealed by statistical series and comparisons, into national policies.

¹⁶⁷ Joint Comm. on the Econ. Report, 82d Cong., Monetary Policy and the Management of the Public Debt: Their Role in Achieving Price Stability and High Level Employment, Replies to Questions and Other Materials for the Use of the Subcommittee on General Credit Control and Debt Management, Part I, S. Doc. No. 123, pt.1, at 320 (1952) [hereinafter Patman Hearing Questionnaire Replies].

. . .

At the same time, by making the bulk of these materials available in its publications, the System helps to keep the public fully informed. Largely statistical in character, often accompanied by interpretative commentary, the System's reports serve to provide better general understanding of the functioning of the economy. They are meant to be objective, authoritative, and comprehensive discussions of economic trends.¹⁶⁹

The Board confirmed that, in its view, the "scope of this work has been appropriately phrased." ¹⁷⁰

Each Reserve Bank President was requested to comment for his Bank. All denied having spent any part of their budget to sway public opinion, though some caveated that, by their nature, subjects of monetary and credit policy were sometimes controversial. And some used the opportunity to showcase the innovations they had developed in communicating with the public, ranging from motion picture films portraying the inner workings of the Fed, to trainings for college professors, and a book entitled "Your Money and the Federal Reserve System" for use in high schools.

The written responses seem to have satisfied the subcommittee. Representative Patman did not raise the issue of research resources and public controversy in the subsequent live hearings.¹⁷³ And throughout the remainder of the 1950s, while System-wide committees were formed to coordinate research and share knowledge between the Board and Reserve Banks' research

¹⁶⁹ *Id.* at 320–21.

¹⁷⁰ *Id.* at 321.

¹⁷¹ *Id.* at 325–28 ("We feel after consideration of question here that we would have no expenses to report since 1946 as having been incurred for the purpose of influencing public opinion on controversial matters.").

¹⁷² *Id.* at 323–25.

¹⁷³ Monetary Policy and the Management of the Public Debt: Hearings Before the Subcomm. On General Credit Control and Debt Management of the Joint Comm. On the Econ. Report, 82d Cong. 3–7 (1952), https://fraser.stlouisfed.org/title/monetary-policy-management-public-debt-2 44 (discussing numerous issues and priorities of the Federal Reserve, without mention of research resources).

departments, the Board did not attempt to control the substance or personnel of the Reserve Banks' departments again.¹⁷⁴

5. 1977: The Community Reinvestment Act

The next significant evolution of the Reserve Banks' research function was brought about by 1977 legislation in the Community Reinvestment Act (CRA).¹⁷⁵ Passed against a backdrop of urban decay and under-investment in low income neighborhoods, Congress's goal in the CRA was to ensure that low and moderate income families would have sufficient access to credit.¹⁷⁶ One core provision of the law requires the Fed to assess its member banks' track record of making loans to those groups.¹⁷⁷ Given that this proviso implicates the ongoing supervisory function of the Fed, and depends upon an intimate understanding of local communities, the Fed Board delegated most of this CRA responsibility to the Reserve Banks.¹⁷⁸

To aid their assessment of how well local banks were meeting these local needs, the Reserve Banks subsequently built out "community development" functions that would operate in tandem

¹⁷⁴BD. OF GOVERNORS OF THE FED. RSRV. SYS., PROFESSIONAL RESEARCH PERSONNEL IN THE FEDERAL RESERVE SYS. (1955), https://fraser.stlouisfed.org/archival-collection/committee-history-federal-re serve-system-1342/directories-457505 (discussing many aspects of research, yet neglecting to put forth a resounding goal or direction).

Community Reinvestment Act, 91 Stat. 1147 (1977) (codified as amended at 12 U.S.C. § 2901 et seq.).

¹⁷⁶ See Loretta Mester, President & CEO, Fed. Rsrv. Bank of Cleveland, Speech at the 2017 Summit on Housing, Human Capital, and Inequality, The Federal Reserve System and Community Development: The Why, The How, and The What (June 23, 2017), https://www.clevelandfed.org/newsroom-and-events/speeches/sp-20170623-frs-and-community-development.aspx (describing the Federal Reserve's role in promoting community development).

¹⁷⁷ 12 U.S.C. § 2903 ("the appropriate Federal financial supervisory agency shall prepare a written evaluation of the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods.").

¹⁷⁸ See Mester, supra note 175 ("In 1981, the Board of Governors asked each Reserve Bank to appoint a Community Affairs Officer, and from there, the Fed built a function to provide technical training and support to depository institutions to help bolster compliance with the CRA.").

with the research function.¹⁷⁹ Practically, this has led to a research function that is also concerned with on-the-ground "first-hand knowledge" and "regular contact with local organizations."¹⁸⁰ Ostensibly, the community development information is collected and relationships maintained in order to feed these "objective" assessments and data points to policymakers at the Fed.¹⁸¹

Over the years, each Reserve Bank has come to set its own community development agenda in response to local economic issues. Most have expanded their programs to consider questions of economic health in the community generally, which sweep more broadly than LMI access to credit. For example, the San Francisco Reserve Bank has taken the position that, "[o]ur economy can only reach its full potential when everyone is educated, healthy, and has an affordable place to call home. Addressing the long-standing challenges that limit opportunity requires collaboration across sectors

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¹⁷⁹ See, e.g., id. ("In addition to aiding monetary policymaking, the Fed's structure allows us to perform our other functions more effectively, too. Of course, one of those is near and dear to everyone in this room: the Federal Reserve System's role in identifying effective community development policies and best practices for promoting economic progress and access to credit in low- and moderate-income neighborhoods.").

¹⁸¹ *Id.* ("In particular, our regional structure insulates us from political influence, so we are viewed as a trusted and objective party. We hold that public trust very dearly, and always strive to maintain our credibility. That is why we aim to conduct our research with the utmost rigor and the highest quality standards, looking objectively at all sides of an issue and potential solutions.").

¹⁸² See, e.g., Jesse M. Keenan & Elizabeth Mattiuzzi, Climate Adaptation Investment and the Community Reinvestment Act, Fed. Rsrv. Bank of S.F. (June 2019),

https://www.frbsf.org/community-development/publications/community-development-research-briefs/2019/june/climate-adaptation-investment-and-the-community-reinvestment-act/ ("Following Hurricanes Katrina and Rita in 2004, the Federal Reserve System encouraged banks from across the country to invest in recovery efforts, including those that serve people displaced to other areas not in the major disaster area ").

¹⁸³ See Mester, supra note 175 ("[M]any factors influence the economic vitality of households and neighborhoods, including access to credit and capital workforce development, affordable housing, infrastructure, and health services. There is ongoing research and engagement across the Federal Reserve System in each of these topic areas").

and disciplines."¹⁸⁴ Regarding climate risk specifically, the San Francisco Fed has urged their "need to understand" climate-related outcomes for the communities and industries in the district. ¹⁸⁵ Apparently, on that view, to the extent the Reserve Bank identifies a link between climate risk and local economic health (and LMI credit), then education, research, and outreach on the subject would be justified as within its CRA mandate.

Yet using the CRA as legislative cover to address a wide range of social and economic issues departs from the pre-1977 status quo of the research function. Insofar as the Board had maintained for itself some supervisory review authority over the research functions, and a concern for the overall messaging in their materials, the assumption was that research ought to be in furtherance of Fed policy. ¹⁸⁶ In turn, this implied that the research should only be undertaken in regard to the universe of issues about which the Fed could, indeed, lawfully make policy. ¹⁸⁷

Today, however, under the aegis of the CRA, some Reserve Banks may feel untethered to that conventional—but not formally binding—constraint. As will be recalled, since 1913, the authority for and limits on the Reserve Bank research function had never been spelled out with detail in the Federal Reserve Act; instead they evolved pursuant to internal Fed norms. As such, relying on the CRA as authority to pursue questions that go further than the Fed's other

¹⁸⁴ See Innovations in Healthy Food Access and Finance, FED. RSRV. BANK OF S.F. (Dec. 14, 2015), https://www.frbsf.org/wp-content/uploads/sites/3/innovations_in_healthy_food_access_and_finance_program_bios.pdf [https://perma.cc/GPQ9-WG2H].

¹⁸⁵ See Recognizing Climate Change as an Economic Issue, FED. RSRV. BANK OF S.F. (Apr. 28, 2020), frbsf.org/our-district/about/sf-fed-blog/video-climate-change-economic-issue/.

¹⁸⁶ See, e.g., Patman Hearing Questionnaire Replies, supra note 166, at 320 ("The guiding view of the Board of Governors and the Federal Reserve Banks in reports and information made available to the public is that an adequate and critical public understanding contributes to an intelligent credit and monetary policy designed to foster stable economic progress. Accordingly, the System is actively interested in disseminating factual and explanatory information on general economic conditions and on credit and monetary policies. Such is deemed to be the System's responsibility since the preservation of democratic institutions depends on an informed public opinion.").

¹⁸⁷ See id.

statutory mandates does not expressly conflict with the Federal Reserve Act (notably, though, the Act does not expressly sanction the research function to do so either). Indeed, there are those at the Federal Reserve Board who view the CRA as a civil rights act and a broad grant of authority across the System to use Fed policy for a wide range of social and economic justice ends.¹⁸⁸

As such, the silence in written internal Fed policy begs the question of whether, and to what extent, Reserve Banks are relying on the vague grant of authority in the CRA to expand their focus beyond the Fed Board's statutory mandate. To answer that question, Part III undertakes an empirical analysis of Reserve Bank research from 2006 through the present.

6. 2006-2021: Empirical Analysis of Reserve Bank Research

In 1952, the Reserve Banks assured Congress that they were in no way engaged in research designed to "sway public opinion" on "controversial" issues. 189 Whether that remains true today is an empirical question. Accordingly, we have hand-collected nearly 5,000 working papers—which exhaust the universe of formally written research papers by each of the twelve Reserve Banks—to gain a factual basis for understanding what the Reserve Banks are researching. Our data collection begins at the start of Ben Bernanke's chairmanship and also covers Janet Yellen and part of Jerome Powell's chairmanships. The transition in Chairs gives nuance to our analysis of the relationship between research and the politicization of the System, as Bernanke was appointed by President Bush (and

¹⁸⁸ As Fed Board Governor Lael Brainard remarked, in her view, "the CRA was one of several landmark civil rights laws to address systemic inequities in credit access. The CRA was intended to reinforce the other statutes in addressing redlining, wherein banks declined to make loans or extend other financial services in neighborhoods of largely Black and other minority households, in part based on government maps that literally delimited these neighborhoods in red as high credit risks (figure 1). By enacting the CRA, lawmakers aimed to reverse the disinvestment associated with years of government policies and market actions that deprived lower-income and predominantly minority areas of credit and investment." Speech, Lael Brainard, Governor, Bd. of Governors of the Fed. Rsrv. Sys., Strengthening the CRA to Meet the Challenges of Our Time (Sept. 21, 2020), https://www.federalreserve.gov/newsevents/speech/brainard20200921a.htm.
https://www.federalreserve.gov/newsevents/speech/brainard20200921a.htm.

reappointed by President Obama), Yellen by President Obama, and Powell by President Trump (and reappointed by President Biden). ¹⁹⁰ Janet Yellen was then later appointed Secretary of the Treasury by President Biden. ¹⁹¹

To study the nature and trajectory of the research function of the Federal Reserve Banks, we have collected novel data on the characteristics of the working papers published in the Banks' working paper series over the past fifteen years. Our team of research assistants accessed, read, and hand-coded information about nearly 5,000 working papers published by all twelve Banks since 2006. The time sample of our dataset covers Ben Bernanke's term as Fed Chair (2006-February 2014), Janet Yellen's term (February 2014-February 2018), and the start of Jerome Powell's term (February 2018-present). 192

We describe the data collection in Section III. The resulting data allows us to quantify, for the first time, how the topics and scope of the Banks' research have evolved over time (Section III.A) and how it varies across the Banks (Section III.B).

III. Data Collection and Variable Definitions

Our dataset includes information about all 4,871 working papers published by the twelve regional Reserve Banks from January 2006 through December 2021. These working papers were accessed through the Reserve Bank websites by a team of research assistants, who recorded the title, publication date, and other information about each paper in a spreadsheet, as described below.

Figure 1 shows the total number of papers in the dataset per year. In total, the Reserve Banks consistently publish around 300 working papers each year.

Figure 1: Working Papers per year for all Reserve Banks

190 See James McBride et al., What Is the U.S. Federal Reserve?, COUNCIL ON FOREIGN RELS. (Jan. 27, 2022), https://www.cfr.org/backgrounder/what-us-federal-reserve.

191 See Janet Yellen, U.S. DEP'T OF TREAS., https://home.treasury.gov/about/general-information/officials/janet-yellen (last visited Sep. 29, 2022).

¹⁹² See McBride et al., supra note 189 (detailing the terms of recent past Fed chairs).

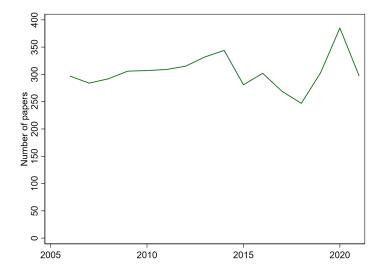
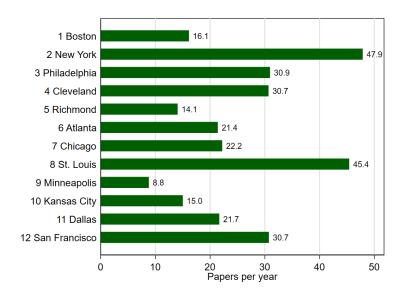


Figure 2 shows the average number of working papers per year for each Reserve Bank. There is substantial variation across districts, with district nine (Minneapolis) producing nine working papers per year while district two (New York) produces forty-eight per year. This variation reflects differences in the sizes of the research departments across the Reserve Banks. The Minneapolis Fed website lists twenty-seven economists on staff, while New York lists sixty-five¹⁹³

Figure 2: Number of Working Papers per year by Reserve Bank

193 Economic Research, Fed. Rsrv. Bank of Minneapolis, https://www.minneapolisfed.org/economic-research/economists (last accessed Sep. 29, 2022); Staff Economists, Fed. Rsrv. Bank of N.Y., https://www.newyorkfed.org/research/economists (last accessed Sep. 29, 2022).

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For each working paper, the research assistants recorded the Journal of Economic Literature (JEL) codes and keywords that were assigned by the paper's authors or editor. JEL codes are widely used in economic research to assign topics and subtopics to research papers. ¹⁹⁴

Papers that are submitted to economic research journals are nearly always required to include JEL codes (typically around three to six of them) below the abstract of the paper. A JEL code takes the form of a letter, which indicates the general category of the paper, followed by a two-digit number, which indicates the subcategory. For example, JEL codes that begin with E have the general category of "Macroeconomics and Monetary Economics;" within this are seventy-one subcategories. 196

As might be expected, our research found that JEL codes beginning with E are most common among the Reserve Bank working papers we studied. Just under half (47%) of the working papers we researched have at least one JEL code beginning with E.

¹⁹⁴ JEL Classification System/EconLit Subject Descriptors, Am. Econ. Ass'n., https://www.aeaweb.org/econlit/jelCodes.php (last accessed Sep. 29, 2022) (illustrating that the "JEL classification system . . . is a standard method of classifying scholarly literature in the field of economics").

¹⁹⁵ Id.

¹⁹⁶ *Id*.

Next most common are codes beginning with G (Finance). 28% of papers we studied have at least one such JEL code. And 19% of the papers we researched have at least one C (Econometrics) code.

The research assistants also recorded whether the paper contains any of the following topics: climate, income inequality, or gender inequality. Using this data, we define the following dummy variables for each paper:

Inequality: The paper contains income or gender inequality as a topic (as coded by research assistants), or "inequality" is contained in a paper keyword.

Climate: The paper contains climate as a topic (as coded by research assistants), or "climate," "green," or "global warming" is contained in a paper keyword.

Gender: The paper has gender inequality as a topic (as coded by research assistants), or "gender" or "female" is contained in a paper keyword.

Race: The paper contains race or some variant of the word race (e.g., racism, racial) as a keyword, or has the JEL code J15 ("Minorities, race, non-labor discrimination").

Activist: Any of Inequality, Climate, Gender, or Race is coded as true.

Overall, 8.1% of the papers we researched were coded as having inequality as a topic, 1.0% climate, 2.2% race, and 1.4% gender; 10.0% of papers have at least one of those topics and are coded as activist. Note that a given paper may be tagged with more than one of these topics, so the share of activist papers is slightly lower than the sum of the shares of climate, race, gender, and inequality papers.

First, we examine whether these topics have become more prevalent over time. Next, we examine variations across districts in topic coverage.

A. Topics Over Time

In this Section, we consider how the coverage of activist topics like inequality, climate, race, and gender have evolved over time. As mentioned in the Introduction, some members of the Senate Banking Committee had accused several of the Reserve Banks of "woke mission creep," suggesting that their research functions have

begun to focus on these topics more than in the past. 197 Our data allows us to test whether this is empirically true.

Figure 3 shows time series graphs of the share of working papers with each topic coding over time. Clear upward trends are both visibly apparent and statistically significant. For inequality, climate, race, and gender, the shares were higher in 2021 than in any previous year, at 15%, 4%, 6%, and 4%, respectively. The race and gender shares averaged only 1% per year before 2020, so the increases to 6% and 4% are substantial.

Altogether, 20% of papers from 2021 were coded as activist, versus around 4% to 8% each year from 2006 through 2013. A sizeable increase—to 12%—began in 2014, when President Barack Obama appointed Janet Yellen as Chair of the Board of Governors. In the first year of her term, Yellen famously gave a speech about inequality at the Federal Reserve Bank of Boston.¹⁹⁹ The speech led to a slurry of politically charged news coverage, including a *Washington Post* opinion piece titled, "Janet Yellen is in danger of becoming a partisan hack: The Federal Reserve chair shouldn't be picking a side in political debates."²⁰⁰ This op-ed argued that "[t]he Fed chair shouldn't sound like a left-leaning politician opining about hot-button political issues."²⁰¹ In contrast, a Brookings Institution op-ed, titled "Janet Yellen's Inequality Speech Revealed a 'Closet Conservative'" argued:

²⁰¹ *Id*. at 1.

¹⁹⁷ See Toomey Expands Review of Woke Mission Creep by Regional Federal Reserve Banks, *supra* note 31.

¹⁹⁸ Time series regressions of any of the series in Figure 3 on a time trend yield a statistically significant positive coefficient on the time variable.

Perspectives on Inequality and Opportunity from the Survey of Consumer Finances, Speech at the Conference on Economic Opportunity and Inequality (Oct. 17, 2014), https://www.federalreserve.gov/newsevents/speech/yellen20141017a.htm

^{(&}quot;It is no secret that the past few decades of widening inequality can be summed up as significant income and wealth gains for those at the very top and stagnant living standards for the majority. I think it is appropriate to ask whether this trend is compatible with values rooted in our nation's history[.]").

²⁰⁰ Michael R. Strain, *Janet Yellen is in Danger of Becoming a Partisan Hack*, WASH. POST (Oct. 23, 2014), washingtonpost.com/posteverything/wp/2014/10/23/janet-yellen-is-in-dange r-of-becoming-a-partisan-hack/.

Yellen's conservative critics did not read her speech closely enough. Sure, she highlighted the problem of inequality framed in terms of the struggles of those in the middle; and yes, she nodded to Democrat favorites like pre-K education. However, the more innovative sections of her speech—claiming business ownership and inherited wealth as positive contributions to an opportunity society—were manna for the right. This was a speech that was very liberal in tone but very conservative in content: blue on the outside, red in the middle. ²⁰²

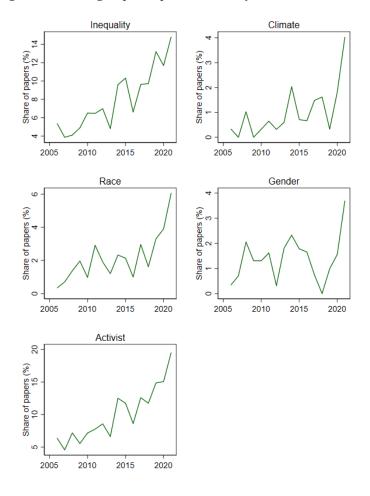
It does seem that Chair Yellen's concern with inequality coincided with a reorientation of the research agendas of the Reserve Banks. Of course, it is not clear whether her interest in inequality directly influenced the agenda of the Reserve Bank research departments, or whether Yellen and the research departments were both influenced by outside factors (such as, for example, concerns about how the Fed's then-ongoing Large-Scale Asset Purchases²⁰³ and the extended period with interest rates at the zero lower bound would affect inequality).

²⁰² Richard V. Reeves, Opinion, *Janet Yellen's Inequality Speech Revealed a 'Closet* Conservative', BROOKINGS (Oct. 24, 2014), .brookings.edu/opinions/janet-yellens-inequality-speech-revealed-a-closet-c

onservative/.

Large-Scale Asset Purchases, FED. RSRV. BANK OF N.Y., https://www.newyorkfed.org/markets/programs-archive/large-scale-asset-purchases (last accessed Aug. 2, 2021) (summarizing Federal Open Market Committee's large-scale asset purchases between 2008-2014).

Figure 3: Working Paper Topics over time for all Reserve Banks

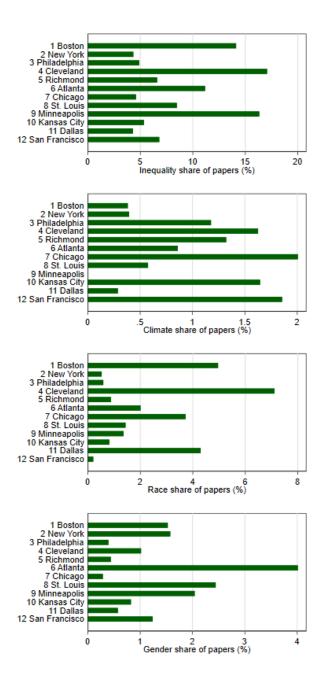


B. Variation Across Districts

Recall that the 12 regional Reserve Banks are private, distinct institutions, each with its own research director and research staff. As we have argued, the federalist structure of the Federal Reserve System allows the Reserve Banks to function in a sense as laboratories, each free to undertake its own research agenda. Each bank may develop its own areas of interest and expertise through the researchers it hires and through topics of particular interest in its geographical region.

Indeed, there is considerable heterogeneity across the Reserve Banks in their working paper series. Figure 4 displays, for each of the 12 Reserve Banks, the share of working papers that cover inequality, climate, race, and gender. For example, Boston, Cleveland, and Minneapolis have the largest shares of papers on inequality, while Chicago and San Francisco have the largest shares on climate. Cleveland, Boston, and Dallas have the highest shares of papers about race. In the case of Dallas, this is due to its focus on the Hispanic workforce. Atlanta has the largest focus on gender.

Figure 4: Topics by District



Although the Reserve Bank paper series differ in their overall coverage of activist topics, most display a similar trend of increasingly activist coverage over time. In Figure 5, we split the data into three time periods: before the Great Recession (2006–2007), the Great Recession and near aftermath (2008–2012), and post-Great Recession (2013–2021). For each Reserve Bank, we plot the share of activist papers in each time period. For 11 out of 12 Banks, the share is greatest in the latest time period. For 10 out of 12, the share is lowest in the earliest time period.

Figure 6 is similar, but focuses only on 2020 and 2021 papers. In these most recent years, Boston and Minneapolis have the greatest share of activist papers, each with 32%. Atlanta, Chicago, St. Louis, and San Francisco follow with around 20% each. Only New York and Philadelphia have shares below 10%.²⁰⁴

²⁰⁴ Interestingly, Senator Toomey singled out San Francisco, Boston, Atlanta, and Minneapolis for their coverage of climate change, race, and inequality, and these do appear to be among the Banks that publish the most on these topics. *See supra* notes 31–35 and accompanying text (listing Reserve Bank locations "singled out" for publishing material on these topics).

Figure 5: Papers with Activist Topics by District and Time Period

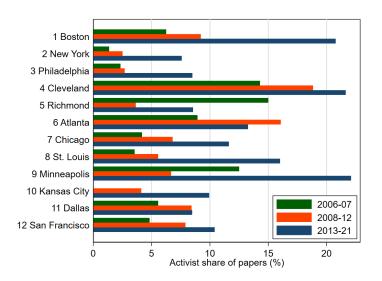
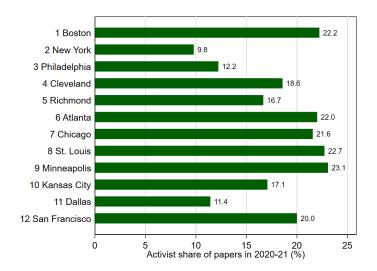


Figure 6: Papers with Activist Topics by District in 2020–21



In the historical analysis in Section I, we showed how the research function of the Reserve Banks developed in scale and scope since the Federal Reserve Act of 1913. The economic research and statistics produced by the Reserve Banks has informed monetary and regulatory policy—especially in times of crisis like the Great Depression, the Great Inflation, and the Great Recession—and has contributed to the public reputation and credibility of the Fed. Given the hugely important role of the research function of the Reserve Banks, it is perhaps not surprising that this function was part of the power struggle between the Board and the Reserve Banks in the early decades of the Fed, and has been subject to political controversy throughout the years.

In the 1940s and 1950s, for example, the potential for controversy stemming from Reserve Bank research surfaced on several occasions. Most notably, as we document, a congressional subcommittee raised the question of whether the Reserve Banks were "influencing public opinion on controversial matters." The political controversies of the past are paralleled by similar concerns today—evidenced by recent charges of "woke mission creep" by members of the Senate Banking Committee. 206 The Committee's charges are anecdotal, but here we have provided analysis of larger data. The research function has changed in the past 15 years, and especially in the past 7 years, with a trend toward greater focus on the issues mentioned by the Committee: inequality, climate, race, and gender.²⁰⁷ These topics are covered in a growing minority of working papers produced by the Reserve Banks—in as many as one in three working papers produced by the Reserve Banks of Minneapolis and Boston, but in fewer than one in ten working papers produced by the Reserve Banks of New York and Philadelphia. 208

The growing focus on these topics is not inherently problematic. As noted in the 1943 memo, in order to fulfill their duties, the research staffs "must be prepared to express views which

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²⁰⁵ Patman Hearing Questionnaire, *supra* note 30, at 11 ("List and discuss any expenses which have been incurred during the period since 1946 by the Board of Governors, or, to the Board's knowledge, have been incurred by the Federal Reserve banks for the purpose of influencing public opinion on controversial matters.").

²⁰⁶See Toomey Expands Review of Woke Mission Creep by Regional Federal Reserve Banks, *supra* note 31 (exemplifying Sen. Toomey's concern that Fed's research function is "bitterly partisan").

²⁰⁷See Figure 3.

²⁰⁸See Figure 6.

may imply or require taking a position on controversial issues."²⁰⁹ But as the memo went on to warn, "This involves the necessity of guarding against embarrassing the System and of lessening the effectiveness of the Banks' work in research and of the Banks' leadership. In handling controversial questions responsible officials must act so as to avoid placing the System in the position of appearing to be biased advocates."210 In the Section, we consider the warning echoed in this note: we discuss how the Reserve Banks can, when necessary, address controversial issues, and how they can do so with minimal risk to the reputation and effectiveness of the System as a whole.

IV. The Future of the Research Function

Thus far, the Article has developed a history of the research function of the Reserve Banks as well as a contemporary snapshot of the substance and scope of their various departments' work. Since the Fed's founding, the research function of the Reserve Banks has played a valuable role within the System—in supporting policy decision-making and in linking the public with the Fed. But as certain Reserve Banks have begun to push the Overton Window over the past fifteen years, their initiatives now throw open questions about the legal and policy basis of their research functions. ²¹¹

As Part III has shown, to varying degrees the Reserve Banks have increasingly engaged in what the Article has referred to as activist research—that is, research that would appear to step beyond the Fed's direct mandates. These topics—we focused on inequality, climate, gender, and race—can certainly have indirect links to the Fed's mandate. For example, inequality may affect monetary policy

²⁰⁹ See Memorandum from E.A. Goldenweiser to Board of Governors, supra note 145.

²¹⁰ *Id*.

²¹¹The Overton Window, MACKINAC CTR. PUB. Pol'Y, https://www.mackinac.org/OvertonWindow ("The Overton Window is a model for understanding how ideas in society change over time and influence politics").

transmission and inflation.²¹² This may or may not be a problem for the System overall.

A. Assessing Activist Research

On one hand, the Reserve Banks may well be reacting to demands for greater economic study and understanding in their research. Reacting to these demands would seem consistent with the general purposes for which the Reserve Banks were intended by the framers of the Federal Reserve Act.²¹³ Broadly speaking, a wide range of research, across a spectrum of viewpoints, stimulates intellectual debate in a way that any public agency should embrace. In terms of resource allocation, insofar as the Reserve Banks are largely self-funded through the capital stock provided by their member banks, the taxpayer need not be concerned with the allocation of resources toward research with which she disagrees.²¹⁴ There would thus be substantial costs to restricting Reserve Bank research—both from affronting core democratic values of intellectual freedom-of-thought and debate and from undermining the

https://www.federalreserve.gov/faqs/about 12799.htm (last updated Mar. 1, 2017) ("The Federal Reserve does not receive funding through the congressional budgetary process. The Fed's income comes primarily from the interest on government securities that it has acquired through open market operations.").

²¹² Olivier Coibion et al., *Innocent Bystanders? Monetary policy and inequality*, 88 J. Monetary Econ. 70, 88 (2017) ("[T]]he differential composition of households' incomes appears to be particularly important in explaining the distributional consequences of monetary policy on total household income . . . [and] . . . points to the possibility of significant wealth transfers via unexpected changes in interest rates and inflation.").

213 See 12 U.S.C. § 225a (2018) ("The Board of Governors of the Federal Reserve System . . . shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates.").

214 For general sources on the Fed's funding structure, see, for example, Bill Nelson, *A Very Different Federal Reserve Funding Model*, Bank Pol'y Inst., June

16,
2021, https://bpi.com/a-very-different-federal-reserve-funding-model/; *What Does It Mean That The Federal Reserve is "Independent Within The Government"*?, Bd. of Governors of the Fed. Rsrv. Sys., https://www.federalreserve.gov/fags/about 12799.htm (last undated Mar. 1

experimental, federalist nature that anchored the System's design.²¹⁵ Practically, any such effort to chill research would also carry a real risk of limiting the System's ability to recruit top scholars to its research departments.

To the extent there is a "problem" with the growing activist nature of research, one might view it as a risk of increasing *politicization* and the risk of stoking *populist pressure*.²¹⁶

It does seem that the research function is susceptible to political influence. At times, the policy agenda of the Chair looks to influence the direction of some Banks' research. There may well be societal pressure at play as well. If the political economy of the times pushes and pulls the direction of Reserve Bank research, this could possibly be seen by some as detracting from its putatively technocratic purpose. That perception could then morph into a label of the Reserve Bank's research as "controversial" and designed to influence public opinion on politically charged topics.

Academics have elsewhere canvassed the undesirability of politicizing the Fed.²¹⁷ Some have drawn analogies to other democratically deficient institutions in periods when they wade into contentious waters, most notably, the Supreme Court. As Professor John McGinnis argues,

When the [Supreme] Court has moved beyond its role of preserving the rule of law and tried to effect social transformation as with its decisions against national legislation in the New Deal or in *Roe v. Wade*, it has often created a backlash. Currently, the Fed is considering undertaking new roles in such

²¹⁵ See Kartik Athreya, *Is the Fed Too Active?*, Econ Focus, Second/Third Quarter 2021, at 36 (arguing that to fulfill its mandate the Fed should strive to understand climate change's plausible effect on U.S. macroeconomic performance); see also Directors' Responsibilities Memo, supra note 24, at 7 ("There should be no limit to the work of the Federal Reserve Banks in the field of cooperation, education, and leadership.").

²¹⁶ See Skinner, supra note 2, at 301 (asserting that Hamilton did not intend either central bank to be overly responsive to political pressure).

²¹⁷ See generally Binder & Skinner, supra note 4, at 51–52 (indicating that a "more politicized, presidentially controlled Fed" could have negative impacts on the Fed and would benefit very few people, if any); Skinner, supra note 2 (arguing that "the practical dangers of Fed activism range from monetary policy failures to popular antipathy, reminding us that politics and central banking do not go well together.").

divisive issues as climate change and inequality. The experience of the Supreme Court suggests that those controversial initiatives are likely to exacerbate an already nascent polarization. ²¹⁸

The politicization of the Fed could generally undermine its legitimacy in ways that would ultimately be socially destabilizing.

Second, but related, activist research might mislead the public about what policy initiatives the Board can or wants to undertake (i.e., by appearing to speak for the System). The Board is authorized to pursue only those goals set out in statute, such as price stability and maximum employment (in the monetary policy arena) and safety and soundness (in the microprudential arena). While society may earnestly wish for governmental solutions to address problems that are outside the Fed's mandate, the Fed is constrained from exceeding the authority Congress has given it. To suggest to the public otherwise will ultimately create tension between the Fed and the public, and possibly between the Fed and its foreign counterparts.²¹⁹ As such, Reserve Bank research could create legal and political difficulties for the Fed if it drums up populist pressure on the Board to act beyond its existing mandate.

B. Toward Accountability, if not Neutrality

This Section discusses a menu of reform options—several of which have been proposed before—to examine how they might impact the politicization of, or the propensity for, populism from the research function. Ultimately, we conclude that the balance of the interests in favor of vibrant, experimental research and a neutral, technocratic research function weigh in favor of a slightly more focused Board policy on Reserve Bank research.

1. Appointment and Confirmation

Professor Peter Conti-Brown has urged presidential appointment and senate confirmation for certain staff positions at the

²¹⁸ McGinnis, *supra* note 4; *see also* Binder & Skinner, *supra* note 4 (developing empirical evidence of the risk of polarization that would accompany Fed activism).

²¹⁹ See Christina Parajon Skinner, Central Banks and Climate Change, 75 VAND. L. REV. 1301 (2021) (discussing the legal authority the Fed has, and does not have, to address climate change).

Fed that wield tremendous influence.²²⁰ The question, to his mind, is whether "staff exercising the kind of values-oriented judgment should demand greater democratic accountability, or [are] those roles strictly technocratic and therefore better placed at a remove from partisan politics."²²¹ Answering that question, Conti-Brown makes an argument for requiring the head of the Board's Division of Research and Statistics to go through the confirmation process.²²² Motivated by similar concerns, he points to the Reserve Banks' "potential to make policy and constitutional trouble for the rest of the system," thus urging Presidential appointment for their Presidents as well.²²³

One might read the findings of Part II and III to bolster the case for Presidential appointment and Senate confirmation of Reserve Bank Presidents, thus by definition subjecting the research function to greater vetting (and thus ex ante accountability) and possibly a statutorily defined removal power (ex post accountability). One might even extend Conti-Brown's reform proposal, leveraging this Article's data, to sever the autonomy of the research functions and subsume them within the Board's Division of Research and Statistics (and, again, making the head of that Division subject to the political appointment and confirmation process).

Such reform would make the research function more accountable to the democratically responsive Executive and Congress. That might be a compelling enough reason for some. In our view, however, such reform would be unlikely to reduce activism—if anything, making the leader of research a political appointee would only stand to increase it. On the whole, subjecting the heads of research to the Senate Confirmation process is a rather unattractive option given the importance of regional diversity, experimentation, and autonomy of the Reserve Banks' research.

2. Purse Strings

²²¹ *Id*.

²²⁰ Conti-Brown, *supra* note 2, at 251.

²²² *Id.* (arguing that although there is a case for subjecting the Board's Division of Research and Statistics to Presidential Appointment and Senate approval, it is not as strong as the case for appointing the Head of International Finance and the General Counsel through the same method).

²²³ *Id.* at 254.

A second commonly discussed Fed reform focuses on budget. The Fed is unique among administrative agencies in that it is not subject to congressional appropriations and gains significant operational independence from that fact.²²⁴ The Fed relies primarily on the interest it earns on the government securities that it acquires through open market operations. After funding its expenses, the Fed turns over any such earnings to the U.S. Treasury.²²⁵ This seigniorage system means that Congress lacks the carrot and the stick attached to the appropriations process.

Precisely as Representative Patman pressed in his 1952 hearings, "\$23 billion in Government securities," and the Fed may then "use that money as they see fit . . . for research or anything else . . . maybe we should give consideration to the question as to whether or not an agency like the Federal Reserve can be an agency of Congress and not come to Congress for its money."

The question of budget autonomy could be seen as relevant to research (and research activism), too. Similar to appointments, requiring the research divisions to go through the appropriations process would also give Congress an ex ante method of holding the research function to account on whatever dimension it so chose. Subjecting Fed research to appropriations might be an even more powerful form of accountability than appointments because it is ongoing—each year, research functions would be required to justify their work in order to be (re)funded.

This reform would thus be likely to limit the extent to which the Reserve Banks pushed the Fed to Act beyond their congressionally given mandate; and the legislature might be more likely to push back against overt efforts to circumvent its authority. In terms of outcomes, however, it is unclear whether such reform would further politicize the Banks' research or keep it in more neutral territory. And in practice, the reduction in the Fed's operational independence seems likely to outweigh the value in whatever safeguard against mission creep it might install.

²²⁴ See Peter Conti-Brown, The Institutions of Federal Reserve Independence, 32 Yale J. on Reg. 257 (2015).

²²⁵ What Does It Mean That the Federal Reserve is "Independent Within the Government"?, supra note 213.

Monetary Policy and the Mgmt. of the Pub. Debt: Hearings Before the Subcomm. on Gen. Credit Control and Debt Mgmt. of the Joint Comm. on the Econ. Report, 82d Cong. 60–63 (1952) (Statement of Wright Patman).

3. Research Mandate

A more direct option might be for Congress to amend the Federal Reserve Act to further clarify the Reserve Banks' role vis-à-vis research. One reason why the Reserve Banks' research function may appear vulnerable to politicization is because its purpose and goals do not exist in law. As will be recalled, the Federal Reserve Act neither specifies the nature of the research it expects the System to undertake nor sets any limits on it. Meanwhile, the Board, as general supervisor of the Reserve Banks, is free to exercise oversight in as stringent or as relaxed a manner as it deems convenient or appropriate at any one point in time—and to fashion internal policy accordingly.²²⁷ Other agencies, like the Office of Financial Research, have a research mandate specified by statute. Section 5343 of the Dodd-Frank Act spells out the purpose and duties of that office. 228 It also, notably, subjects the director of the office to regular reporting and testimony requirements before the Senate's Banking Committee and the Committee on Financial Services in the House of Representatives.²²⁹

²²⁷ See Federal Reserve Act, Pub. L. No. 63-43, § 11(a), 38 Stat. 251, 261 (codified as 12 U.S.C. § 248(a)(i)) (granting the Board the authority "[t]o examine at its discretion the accounts, books, and affairs of each Federal reserve bank[.]"); id. § 10 (granting the Board authority "[t]o exercise general supervision over said Federal reserve banks."); 12 U.S.C. § 248(a)(n) (granting the authority "[t]o examine, at the Board's discretion, any depository institution. . . .").

²²⁸ Dodd-Frank Act, 12 U.S.C. § 5343 (2010) ("The purpose of the Office is to support the Council in fulfilling the purposes and duties of the Council, as set forth in subtitle A, and to support member agencies, by— (1) collecting data on behalf of the Council, and providing such data to the Council and member agencies; (2) standardizing the types and formats of data reported and collected; (3) performing applied research and essential long-term research; (4) developing tools for risk measurement and monitoring; (5) performing other related services; (6) making the results of the activities of the Office available to financial regulatory agencies; and (7) assisting such member agencies in determining the types and formats of data authorized by this Act to be collected by such member agencies.").

²²⁹ *Id.* ("The Director of the Office shall report to and testify before the Committee on Banking, Housing, and Urban Affairs of the Senate and the Committee on Financial Services of the House of Representatives annually on the activities of the Office...").

4. Board Policy

There thus remains the possibility that the Fed Board could (re)exert its general supervisory authority over the Reserve Banks to reinstall some (even if loose) policy parameters around their respective research functions. Setting out guidelines ex ante, in terms of the general themes of research that would be appropriate for the System to undertake, would look and feel less like Board censorship and more like Board management. This would involve, specifically, once again clarifying how research is an "incidental" power of the Federal Reserve Banks, and what that may entail.

It might also consider mandating greater transparency surrounding reporting of research activities. While Annual Reports to Congress continue to include a section on the Reserve Bank budgets, they do not appear to be disaggregated enough to determine where the research budget sits (does it fall on the "operating" and/or "personnel" line?) or provide the exact breakdown of budget.²³⁰ As a consequence, the public (and Congress) cannot meaningfully scrutinize how research funds are being spent.²³¹

Accordingly, the Board may be best placed to mitigate the risk of politicization through a relatively light touch policy stance. After all, if the Board perceives that the Reserve Banks' research is skewing public perceptions about its powers or agenda, internal policy and supervision might be the most direct yet least intrusive way to address it.

5. Communications

Finally, if the overarching concern is that the public conflates the role of the Reserve Banks (non-policymaking, outside of their occasional role on the FOMC) with the Board (pursuing statutory goals), the confusion could be addressed through better communication. What is the research function and what are its limits? What are the implications of Reserve Bank research that explores topics beyond the Fed's statuary mandates—and why do the

²³⁰ See, e.g., Bd. of Governors of the Fed. Rsrv. Sys., Div. of Rsrv. Bank Operations & Payment Sys., 2021 Federal Reserve Bank Budgets Addendum (2021) (exemplifying how the Fed's budget sections are aggregated).

²³¹ See id.

Reserve Banks undertake such academic inquiries if concrete policy impact is not a lawful outcome?

Such clarifying communication might re-frame the role of the Reserve Banks in the Federal Reserve System. With an emphasis on their research contributions, the public might come to see the Reserve Banks not as coterminous with the Board but more akin to powerful civil society members, equipped with a Congressional charter and a balance sheet. So long as the public, the legislature, and the Board have clear sight into their respective research functions—and all maintain clarity around the legal limits on Fed Board action in response to the Banks' research—lines may remain drawn, and politicization of the institution as a whole avoided.

Ultimately, such approach to re-framing and clarifying the research function of the Reserve Banks could be quite salutary for public and political discourse. Returning again to sage words of Louis Brandeis, "sunlight is the best disinfectant." ²³²

V. Conclusion

Since the Fed's founding in 1913, the research function of the Reserve Banks has undertaken rigorous and creative work precisely in order to innovate policy, establish global thought leadership, and keep the public informed. In recent years, the Reserve Banks' research function has been the subject of some political criticism and concern, by appearing to take on topics that are more controversial and subjective than a technocratic central bank is deputized to explore.

This Article used legal and policy history to establish, for the first time, the purpose, evolution, and constraints on the research function of the Reserve Banks. Then, by drawing together a new data set of all Reserve Bank research papers from 2006–2021, the Article sought to compare the historical role of the research function with its current path. While we find that the Reserve Banks' research function has veered off its historical trajectory by pursuing topics that are beyond the Fed Board's statutory mandate, we nonetheless conclude that a balance of interests weighs in favor of maintaining a vibrant, experimental research function. Ultimately, the Article recommends that the Board design policy to hold the research

²³² Louis Branders, Other People's Money and How the Bankers Use It 92 (1914) (coining this phrase in chapter five in urging greater transparency in the securities markets).

function more accountable, lest it politicize the Federal Reserve System or draw popular antipathy against it.