



Working paper

2019

Open Access

This version of the publication is provided by the author(s) and made available in accordance with the copyright holder(s).

Past meets present in policymaking: The Federal Reserve and the U.S.
money market, 1913-1929

O'Sullivan, Mary

How to cite

O'SULLIVAN, Mary. Past meets present in policymaking: The Federal Reserve and the U.S. money market, 1913-1929. 2019

This publication URL: <https://archive-ouverte.unige.ch/unige:121790>

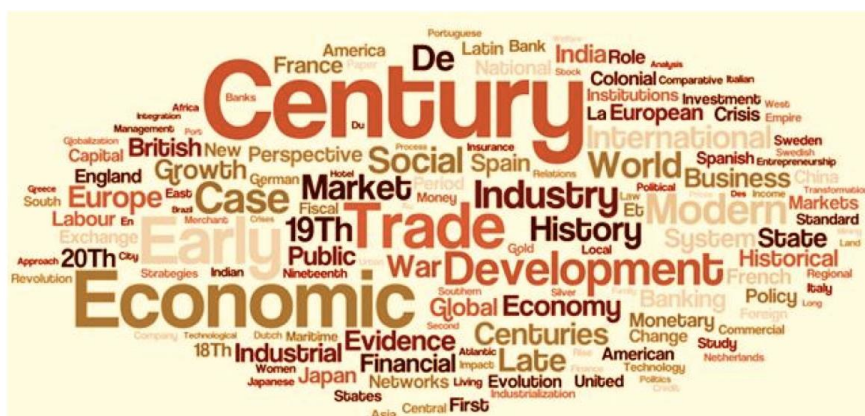


Economic History Working Papers

| No. 2/2019

Past Meets Present in Policymaking: The Federal Reserve and the U.S. Money Market, 1913-1929

Mary O'Sullivan



Past Meets Present in Policymaking: The Federal Reserve and the U.S. Money Market, 1913-1929

Mary O'Sullivan
Paul Bairoch Institute of Economic History
University of Geneva

August 6th, 2019

This paper contributes to our understanding of how the past is invoked in the present in the realm of economic policy. It focuses on the systemic financial reform envisaged by the Federal Reserve Act of 1913, which was supposed to displace the powerful New York call market with a new discount or acceptance market as the centrepiece of the U.S. money market. The paper shows that the past was remembered and ignored in ways that were crucial in generating “lessons” about the necessity and possibility of radical financial reform in the United States. It reveals the strong commitment to these lessons by prominent officials in the Federal Reserve Bank of New York in designing and implementing policies for reform. Their commitment proved to be unwavering even in the face of mounting criticism that their policies were failing to promote the development of an acceptance market. By focussing on the anaemic demand for acceptances as a key obstacle to reform, I suggest that policymakers were so fixated on the past that they overlooked the potential implications of unexpected changes in the US money market since the enactment of the Federal Reserve Act. Thus, they responded with frustration to the failure of their efforts to achieve the financial reform envisaged by that Act without contemplating any serious alternative to it.

Keywords: Financial history; money markets; call loans; acceptances; uses of the past; monetary and financial reform; Federal Reserve Act.

JEL Codes: N00; N22

The project UPIER is financially supported by the HERA Joint Research Programme 3 Uses of the Past which is co-funded by AHRC, AKA, BMBF via DLR-PT, CAS, CNR, DASTI, ETAg, FWF, F.R.S. - FNRS, FWO, FCT, FNR, HAZU, IRC, LMT, MIZS, MINECO, NWO, NCN, RANNÍS, RCN, SNF, VIAA and The European Commission through Horizon 2020.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 649307



I am grateful to all of my colleagues in the UPIER-HERA project, especially Stefano Battilossi and Sebastian Alvarez, for their detailed comments on various iterations of this paper. A special word of gratitude goes to Per Hansen, Eric Monnet, Pilar Nogues-Marco and David Weiman who were so generous and insightful in their criticism. The paper has benefitted too from the observations made by participants in seminars where it was presented, notably at the Business History Conference, the Department of History, Economics & Society as well as the Maison de l'Histoire, Geneva, the Hertie School, Berlin, Queen's University, Belfast, and Séminaire politique de la monnaie. Finally, a special word of thanks to students in my course on “Histoire économique internationale” at the University of Geneva for their engagement in discussions about history and policy.

Past Meets Present in Policymaking: The Federal Reserve and the U.S. Money Market, 1913-1929

Mary O'Sullivan
Paul Bairoch Institute of Economic History
University of Geneva

August 6th, 2019

During the recent economic crisis, the “lessons” of history were explicitly invoked to diagnose the challenges confronting the global economy and to prescribe policies for addressing them. Some economic historians have seen cause for celebration in policymakers’ looking to the past for inspiration in the present. Nicholas Crafts notes, for example, that “[s]ome of the lessons of the 1930s had been well learned, especially by the Federal Reserve led by Ben Bernanke”.¹ However, others have struck a more cautionary note, with Barry Eichengreen emphasising that “policymakers may invoke quite different interpretations of the same historical events” and that certain interpretations may foster problematic policies.² Before economic historians celebrate their newfound relevance, therefore, there are important questions they need to address about how past meets present in the realm of policymaking.

Currently, there is limited research from economic historians that would allow us to understand how policymakers make sense of the past and invoke it in making economic policy. In recent decades, the “uses of the past” have attracted a great deal of interest from a wide variety of historians. The work of Eric Hobsbawm and Benedict Anderson, for example, inspired a whole line of research on the invention of tradition, while Pierre Nora’s work encouraged historians’ interest in the construction of memory.³ In contrast, as Per Hansen observed, “the question of memory and forgetting has never been at the top of the research agenda” of economic history.⁴

For this reason, it is not surprising if recent efforts to open the black box of economic policymaking have come largely from outside the field of economic history. Of particular interest are studies of monetary policymaking from sociologists and political scientists that show that rich archival sources can be mobilised to offer insights on the dynamics of economic policymaking.⁵ Still, even if these studies offer inspiration for economic historians, they are primarily concerned with policymakers’ framing of economic policy. For economic historians, in contrast, it makes sense to pursue a more comprehensive approach to policy making by studying the framing, the design and implementation, and the impact of economic policies.

That is the approach that I adopt here in my study of a landmark reform in US monetary and financial history: the Federal Reserve Act of 1913. My analysis focuses on the structural reform

¹ Nicholas Crafts, “A Historical Perspective on the Great Recession”, February 24th, 2011, <https://voxeu.org/article/great-recession-historical-perspective>.

² Barry Eichengreen, “Economic History and Economic Policy”, *Journal of Economic History*, 72(2), (2012): 304; see also *ibid.*, 2015, *Hall of Mirrors: The Great Depression, the Great Recession, and the Uses – and Misuses – of History*, Oxford & New York: Oxford University Press, 2015: 377.

³ Eric Hobsbawm, “Introduction: Inventing Traditions” in Hobsbawm and Terence Ranger, eds. *The Invention of Tradition*. Cambridge, UK: Cambridge University Press, 1983, 1-14; Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. Rev. ed. London: Verso, 1983; Pierre Nora, ed., *Les lieux de mémoire*, Paris: Gallimard, 1984-1992.

⁴ Per Hansen, “Hall of Mirrors: The Great Depression, the Great Recession, and the Uses—and Misuses—of History”, *Business History Review*, 89, no. 3 (2015), 557.

⁵ Mitch Abolafia, “Narrative Construction as Sensemaking: How a Central Bank Thinks”, *Organization Studies*, 31, no. 3 (2010): 349-367; Andrew Bailey and Cheryl Schonhardt-Bailey, “Does Deliberation Matter in FOMC Monetary Policymaking? The Volcker Revolution of 1979”, *Political Analysis*, 16, no. 4 (2008): 404-427; Schonhardt-Bailey, *Deliberating American Monetary Policy: A Textual Analysis* Cambridge, MA: MIT Press, (2013).

of the country's financial system envisaged by this Act, which was supposed to transform the US money market and its relationship with the country's banking system. A characteristic feature of the US national banking system was the concentration of its reserves in banks in New York City and other central reserve cities, creating a need for a liquid market in which these funds could be placed. Prior to the passage of the Act, the "acceptances" that served as the foundation of British and Continental European acceptance or "discount" markets were little used in the United States and, indeed, most US banks did not even have legal authorisation to accept bills.⁶ Instead, the bankers' balances that accumulated in central reserve cities were placed in New York's long-established call market, where money was lent and borrowed on securities as collateral, giving call loans a centrality in the US money market that was distinctive in comparative perspective.⁷ What the Federal Reserve Act proposed to do was to break with this established pattern by displacing the New York's long-established call market for stock exchange loans with a new acceptance market as the fulcrum of the country's money market.

Economic historians know that the history of recurrent financial and monetary crises in the United States played an important role in motivating the architects of the Federal Reserve Act and that they looked to European history for inspiration on reform. Still, there has been no systematic analysis of how reformers distilled lessons from US and European history in framing their priorities. Furthermore, there has been minimal attention from historians to the specific policies designed and implemented in pursuit of financial reform once the Federal Reserve System came into existence. Contemporary economists, in contrast, closely scrutinised these policies and castigated the Fed for its ineffectual efforts to reform the US money market. However, their work tells us little about why policymakers pursued the policies that they did or proved so resistant to changing them in the face of their alleged failure.⁸ Insofar as the impact of policies for financial reform is concerned, contemporaries were quite sure that they did fail; indeed, as early as 1922, H. Parker Willis, who played a key role in writing the Federal Reserve Act, considered the continued buoyancy of the call market to be the Act's greatest failure.⁹ Recently, however, some economic historians have expressed a revisionist view of the impact of the Fed's policies, with Peter Ferderer, and to a qualified extent, Barry Eichengreen and Marc Flandreau, evaluating them as successful.¹⁰ However, such assessments are based on the growing role of US acceptances in international trade finance, and do not speak directly to reformers' main priorities, which were domestic financial and monetary conditions.

The limited scope of existing research, as well as the mixed messages from the studies that have been done, point to the need for a new study of the financial reform envisaged by the Federal

⁶ Acceptances are short-term credit instruments that are created when a bill of exchange is endorsed or "accepted" by a bank or other guarantor. An importer in the United States may order raw silk from a Japanese exporter and promise to pay him once the goods arrive three to six months later. A written promise to pay -- known as a "bill of exchange" -- may suffice for the exporter of goods but an acceptance -- a bill of exchange that is endorsed or "accepted" by a bank -- has the advantage of additional security from its endorsement or guarantee. That security facilitates its sale for cash, albeit at a discount, giving the seller of goods an alternative to holding it until maturity. For the limited use of acceptances in the post-bellum United States, see James, John, *Money and Capital Markets in Postbellum America*. Princeton, NJ: Princeton University Press, 1978.

⁷ Myers, Margaret. *The New York Money Market: Origins and Development*. New York : AMS Press, 1931; Mary O'Sullivan. *Dividends of Development: Securities Markets in the History of US Capitalism, 1866-1922*. Oxford, UK: Oxford University Press, 2016, chapter 1.

⁸ H. Parker Willis, 'The Federal Reserve System: A Retrospect of Eight Years', *Political Science Quarterly* 37 (1922): 576-7; Benjamin Haggott Beckhart, "The Acceptance Market", part 3 of Beckhart, *The New York Money Market: Uses of Funds*, volume 3, Columbia University Press, 1932; Homer P. Balabanis, *The American Discount Market*, New York: Arno Press, 1980 (1935).

⁹ Willis, H. Parker, 1922.

¹⁰ J. Peter Ferderer, "Institutional Innovation and the Creation of Liquid Financial Markets: The Case of Bankers' Acceptances", *Journal of Economic History*, 63, 2003, 692; Eichengreen, Barry and Marc Flandreau "The Federal Reserve, the Bank of England, and the Rise of the Dollar as an International Currency, 1914-1939", BIS Working Papers, no. 328, 25 November 2010.

Reserve Act. I undertake such a study in this paper, drawing on a rich body of evidence from the archives of the Federal Reserve Bank of New York and other parts of the Federal Reserve System as well as the personal papers of key protagonists in the reform effort. My analysis addresses three important questions about policymaking for financial reform. First, how did the reformers involved in the framing of the Federal Reserve Act distil history into lessons from the past? Second, how did these lessons inform the design and implementation of policies for structural financial reform? Third, how effective were these policies in helping policymakers to meet the challenges of the present?

In Section 1, I argue that the past was remembered and ignored in ways that proved decisive for the “lessons” that reformers learned about the necessity and possibility of radical financial reform. In Section 2, I show that prominent officials in the fledgling Fed, especially in the Federal Reserve Bank of New York, proved assiduous in applying these lessons in the design and implementation of policy. Their commitment proved to be unwavering even in the face of mounting criticism that their policies were failing to promote the development of an acceptance market. Policymakers dismissed these claims, however, insisting that their policies represented the only viable route to the development of a healthy discount market.

In Section 3, I focus on the main source of contention between policymakers and their critics: the anaemic demand for acceptances in the United States. Policymakers had initially believed that US banks and other investors would relish the opportunity to place their funds in a US acceptance market. When their expectations were confounded, policymakers pursued increasingly active measures to stimulate domestic demand for acceptances but to little avail. I show that the challenge of bringing about financial reform was compounded by unexpected changes in the operation of the US money market following the enactment of the Federal Reserve Act. And I argue that policymakers remained so fixated on the past that they overlooked the potential implications of these changes for the direction of financial reform. Thus, they responded with frustration to their failure to achieve the reform envisaged by the Act without considering any serious alternatives to it.

1. “LESSONS” OF THE PAST IN FRAMING REFORM

Debates about banking and currency reform were recurring items on the political agenda in the post-bellum United States given the country’s history of repeated financial and monetary crises. However, it was the panic of 1907 that gave rise to the most far-reaching debate on banking and currency reform since the Civil War and it culminated in the passage of the Federal Reserve Act in late 1913. Not only was the panic a catalyst for reform but the details of the crisis played a crucial role in determining how reform was framed. The panic of 1907 exposed the tight link that New York’s huge market for call loans created between the country’s securities markets and the stability of its banking system, and subjected it to harsh criticism from across the political spectrum.¹¹

Prior to the panic, there had been limited attention to the call market’s role in the US money market in discussions of monetary reform. Instead, Americans were preoccupied with their inelastic currency as the root of their banking and monetary crises and they focussed on currency reform as the solution to their ills. That is quite clear, for example, if we look at the influential report of the Indianapolis Monetary Commission, which was chaired by prominent monetary economist, J. Laurence Laughlin. Published in 1897, the report devoted considerable attention to the history of the US monetary and banking system, and interpreted the crises that marked its existence as evidence of “the failure to provide the means for a gradual and sufficient increase of the volume of the currency” to meet the needs of the growing US economy. The

¹¹ Ellis Tallman and Jon Moen, “The Transmission of the Financial Crisis in 1907: An Empirical Investigation”, Federal Reserve Bank of Cleveland Working Paper, 14-09 (2014).

commission's proposed solution -- a so-called "asset-backed" currency to create greater elasticity -- followed directly from its diagnosis.¹² The commission did make reference to the money market and call loans but they were far from the centre of its historical analysis.

Ten years later, in early 1907, the former chairman of the Indianapolis Commission acknowledged the dangers that the money market might create for financial stability. Even then, Laughlin argued that such dangers could not be overcome through monetary reform, claiming that they were rooted in banks' willingness to extend loans to stock market operators on the basis of questionable collateral. The cure, though "drastic", had been to call these loans, so Laughlin concluded on a sanguine note: "[t]he emetic has been given; and the patient has been purged, much to his advantage".¹³

In October, with the onset of the panic of 1907, it became clear that the patient had not been purged, and by the end of the year, Laughlin had changed his tune. In an article in the *Journal of Political Economy*, he claimed that "[t]he inelasticity of our forms of money is by this time a trite subject" and that it was "the conditions of the money market" that "has brought new interest in measures of reform". He emphasised that there were good reasons for proposed currency reforms but that they were not "a real cure for the evils of such a financial crisis as the present one". That problem, he suggested, needed to be directly confronted by monetary reform through the establishment of "some institution wholly free from politics, or outside influence" that would "be competent to do for the United States what in effect the governor and directors of the Bank of England do for the English money market".¹⁴

Laughlin refined his arguments in the ensuing years as, once again, he assumed a prominent role in debates on monetary and financial reform. In "Banking Reform", published in 1912, Laughlin cast "the weakness of the banking and monetary system of the United States" as a persistent historical problem that meant that "[w]hen it is subject to serious strain beyond the ordinary, as was abundantly shown in the recent panics of 1893 and 1907, it collapses feebly to the injury of all classes of society". He acknowledged that: "[i]n the past, the doctors have disagreed as to the treatment largely because of a disagreement as to the causes at work" but that "the doctors have now come to agree with reasonable certainty that the cause of the trouble is to be found in the organization and control of credit rather than in the issue of notes for circulation in the hands of the public".¹⁵

By 1912, therefore, Laughlin had come to see financial, rather than currency, reform as the primary challenge for the US monetary system. He conceived of that reform as a means for the United States to break with its history of recurrent banking and monetary crises. At the same time, he looked to the historical experience of Europe as a source of inspiration for reform: "[w]e have come to the point where we are willing to learn from seasoned European experience. Although European conditions differ so much from ours that their institutions cannot be boldly transferred to our country, we have much to learn from them". Laughlin did not believe that the United States should follow the European lead in establishing a central bank; instead, he insisted that the lesson to be learned from Europe's historical experience was that: "[i]n this country we are behind Europe in not having a proper discount market for prime commercial paper".¹⁶

¹² Report of the Monetary Commission to the Executive Committee of the Indianapolis Monetary Convention, Indianapolis, 1897, 28-9, 197-223, 346-351.

¹³ J. Laurence Laughlin, "Elastic Currency and the Money Market", *Journal of Political Economy*, 15:4, Apr., 1907, 229-231.

¹⁴ Idem., "Currency Reform", *Journal of Political Economy*, 15: 10, Dec., 1907, 603-610.

¹⁵ Banking Reform, n.d., J. Laurence Laughlin papers, Library of Congress, Washington D.C., Box 5, n.d.

¹⁶ Ibid.

Given Laughlin's prominence in US debates on monetary and financial reform, both before and after the panic of 1907, his changing views are a useful barometer of a broader shift in the framing of these debates. Even before the panic broke, some commentators had sounded alarm bells about the call market as a potential source of financial instability. Writing in 1906, Anna Youngman had emphasised the fragility of the US system of "financial banking". She pointed out that call loans were "easily collectible" when "the speculator to whom the loan has been granted can obtain accommodation elsewhere" but asked "what will be the result of an attempt on the part of all the banks to liquidate, as in times of crisis?"¹⁷ Even more explicit was an article by Wall Street banker, Paul Warburg, in the *New York Times* in January 1907, in which he argued that the New York call market, in tying the liquidity of the nation's banking system to volatile conditions on the nation's securities markets, was a major threat to systemic financial stability in the United States.¹⁸

Warburg's assessment was based on an explicit comparison of the historical development of the US banking system with its European counterparts and his conclusion was less than flattering.¹⁹ He emphasised that the historical development of European financial systems had fostered the emergence of discount markets, based on bills of exchange endorsed by banks or "acceptances", as the centrepiece of European money markets. In the United States, in contrast, no bill or discount market had emerged with the result that the US banking system's liquid resources were placed in the call market and, as a result, "[o]ur whole elasticity is built up on the bond and stock market". For Warburg, therefore, the challenge of reform was to overcome the legacy of US financial history by adopting the banking practices that had emerged in European financial history:

Reason, as well as the experience of all other nations, tells us that we in the United States should attempt to reorganize our present system of issuing and handling commercial bills, in order to create the basis necessary for a modern system of currency and finance. Not only, however, should we endeavour to make such bills the medium of equalizing the daily demand for and supply of money, but we should also by all means try to break with the other system, which makes call loans on stock exchange collateral serve for this purpose.²⁰

Even if such opinions were aired before the panic of 1907, they were given little hearing until the years that followed the crisis. We have seen how Laughlin shifted his views, not least through his interactions with Warburg, and the German banker played a more general role in shifting the focus of the US debate on reform from currency to financial issues.²¹ Of particular importance in this regard was Warburg's success in making his vision of reform persuasive to the National Monetary Commission (NMC). It was established in May 1908 under the chairmanship of Senator Nelson Aldrich to draw up plans for federal banking and monetary reform. When Warburg was invited to contribute an analysis of Europe's discount system to the NMC's series of studies, the banker seized on the opportunity to shape the debate about monetary and banking reform.

In his influential pamphlet on *The Discount System in Europe*, Warburg invoked historical experience to claim that radical financial reform was both necessary and possible for the United States. Warburg had already laid out what he believed to be the defects of the U.S. financial

¹⁷ Anna Youngman, "The Growth of Financial Banking", *Journal of Political Economy*, 14, 1906: 435-43.

¹⁸ Warburg, Paul, "Defects and Needs of our Banking System", *New York Times*, 6 January 1907, AFR14-15. Warburg's ideas for this article were developed in 1902, revised in late 1906 and published only in January 1907 (Paul M. Warburg, *The Federal Reserve System: Its Origins and Growth*, (New York, 1930), v.1, 18).

¹⁹ Ibid.

²⁰ Ibid., 38.

²¹ E. A. Seligman, "Introduction", *Proceedings of the Academy of Political Science*, 4, (1914); Harold Kellock, 'Warburg, The Revolutionist', *The Century Magazine*, May 1915.

system, attributing them to the peculiar course that the country's financial history had taken. And in *The Discount System*, he presented the challenge of reform as breaking with the trajectory of US financial history by discarding its "old-fashioned financial machinery" and replacing it with the "newest appliances".²² Warburg was clear about how the "newest appliances" should be conceived through his careful and concise explanation of the functioning of the discount system in European countries.

Written largely in the present tense, Warburg's pamphlet portrayed the functioning of discount systems in Europe in terms of general principles, abstracting from any role that the distinctive histories of European discount systems might have played in shaping their characteristics.²³ Only in the closing paragraphs of *The Discount System in Europe* did Warburg say "a few words about its historical development" and then he did so only to dispute the widespread belief in the United States: "that the European central bank and discount system have existed for centuries, that this system is the natural development of conditions as they exist in those countries". To the contrary, Warburg claimed, "[t]he discount system has been developed to its present importance only within the last sixty years" and it was achieved as a result of the same kind of "radical changes" which would be necessary "in order to modernize our system".²⁴

The manner in which Warburg downplayed the historical trajectories of European discount systems had profound consequences for the way he framed reform. Essentially it allowed him to argue that radical financial reform was not only necessary but possible in the United States as long as Americans were willing to follow the general principles that made the discount system work so successful in European countries. And he argued that the presence of an active discount market was "insured in nearly every country in the world claiming a modern financial organization, by the existence of some kind of a central bank, ready at all times to rediscount the legitimate paper of the general banks".²⁵

Warburg's vision of monetary and financial reform, as he articulated it in his subsequent plan for a United Reserve Bank, was to find clear expression in the so-called Aldrich plan issued by the National Monetary Commission in 1911 and, specifically, in the rules it laid down for the discount and purchase of paper, which favoured bills of exchange or acceptances used to finance trade and discriminated against call loans.²⁶ Even before the plan was issued, however, Warburg was concerned that powerful New York bankers' role in drafting it would lead to its political demise.²⁷ Thus, when he launched the National Citizens' League in March 1911 to "educate" the public about the importance of banking and currency reform, he made every effort to conceal its connection to Wall Street by establishing it in Chicago and asking J. Laurence Laughlin to lend his considerable academic prestige to its efforts.

What is clear from Laughlin's speeches and articles while he worked for the League is the extent to which he shared Warburg's vision of the necessity and possibility of radical reform of the money market. Laughlin struck a different tune, however, when it came to a central bank. In a

²² Warburg, *The Discount System in Europe*, Washington, 1910, 43.

²³ Warburg, *Discount System*, pp. 13-14. Flandreau and Ugolini make this observation not only about Warburg's pamphlet but about the other reports on the English banking system submitted to the National Monetary Commission (Flandreau, M. and Ugolini, S. (2013). 'Where it all began: lending of last resort at the Bank of England during the Overend- Gurney panic of 1866', in M. Bordo and W. Roberds (eds.), *The Origins, History, and Future of the Federal Reserve: A Return to Jekyll Island* (Cambridge: Cambridge University Press), 113– 61.).

²⁴ *Ibid.*, 42.

²⁵ *Ibid.*, 38.

²⁶ Wicker, Elmus. *The Great Debate on Banking Reform: Nelson Aldrich and the Origins of the Fed*. Columbus, OH : Ohio State University Press, 2005, chapter 5.

²⁷ Paul Moritz Warburg papers, Sterling Memorial Library, Yale University., Series 1 Correspondence, 1904–1932, Box 1, Folder 1, A. Piatt Andrew to Paul M. Warburg, 8 April 1911; 14 April 1911 ; 29 April 1911.

speech in Chicago, a couple of months after the League was formed, Laughlin felt “obliged to confess that a Central Bank in the United States is undesirable and unsuited to our conditions”. Instead, he argued, “[w]e must devise a plan, suited to the democratic genius of our government, which will save us from a dominating, powerful, centralized monetary institution”. Under Laughlin’s guidance, therefore, and to the frustration of Warburg, the League did not endorse the Aldrich plan or any plan for a central bank, calling instead for “coöperation, not dominant centralization, of all banks by an evolution out of our clearinghouse experience”.²⁸ But Laughlin went further still to argue that a further advantage of reforming the money market would be to protect “the credit system of the country from the domination of any group of financial or political interests”. He emphasised that the “at present, country and inland banks send idle funds to New York for the sake of the interest on deposits, and how these funds are loaned on call” and he argued that the rebuilding of the US money market on the basis of an acceptance market would “free our money market from the influence of Wall Street”.²⁹

Given the support that the League enjoyed from Wall Street, it is tempting to interpret such statements as whitewashing but Laughlin’s correspondence makes it clear that he was increasingly anxious about the influence of Wall Street bankers in the League.³⁰ In January 1913, he resigned to resume his academic activities but he did not abandon the cause of monetary and financial reform. To the contrary, he deliberately sought a hearing from prominent Democrats who were gaining influence in Washington and pressed upon them the importance of reforming the US money market.

In a climate of rising concern about a “money trust”, Laughlin was pushing on an open door insofar as the Democrats were concerned. Their negative perception of the call market after the panic of 1907 was reinforced by the Money Trust investigation of 1911-1912. Its counsel, Samuel Untermyer, proved relentless in drawing attention to the absorption of the nation’s financial resources by the call market to finance speculation on Wall Street “when money was needed for crop-moving and other legitimate purposes”.³¹ When the Democrats gave responsibility for monetary and banking reform to Carter Glass, he turned to Henry Parker Willis for help in drafting a plan, giving Laughlin a direct line to reformers. Willis was Laughlin’s former student, and had worked closely with him when he was at the League, and Laughlin became a crucial interlocutor for Willis as he prepared the Glass bill.

The Glass bill emphasised the importance of displacing the call market with a discount market as the centrepiece of the US money market. Moreover, it proposed to achieve such reform through rules on discounting and purchasing paper that were remarkably similar to the Warburg-inspired measures incorporated in the Aldrich plan.³² And when Senator Robert Owen, a Democrat and country banker from Oklahoma, added his support to what became the Glass-Owen bill, greater emphasis was attached to the importance of ousting the “gigantic evil” of the call market from its central role in the nation’s financial system.³³ Indeed, in opening the Senate debate on the Glass-Owen bill, Owen might well have been Paul Warburg in identifying “one of

²⁸ “The Objects of the League”, in J. Laurence Laughlin, “Banking Reform & the National Reserve Association”, An Address delivered before the Ways and Means Committee, Chicago Association of Commerce, May 24, 1911, 19, J. Laurence Laughlin papers, Library of Congress, Washington D.C.

²⁹ *Ibid.*, 19.

³⁰ Laughlin to George Peabody, January 15, 1914, J. Laurence Laughlin papers, Library of Congress.

³¹ U.S. Congress, House, *Report of the Committee Appointed Pursuant to House Resolutions 429 and 504 to Investigate the Concentration of Control of Money and Credit*, 62nd Congress, 3rd Sess., Washington, DC, 1913, 45.

³² Wicker, 2005, chapter 7.

³³ “Clash in Defense of the Money Bill”, *New York Times*, 15 October 1913, 8.

the great benefits of the pending measure” in the fact that “it will withdraw from the gambling enterprises of the Stock Exchange the bank reserves of the country”.³⁴

As a result, notwithstanding the lines that divided the increasingly heated debate on banking and monetary reform that led to the passage of the FRA in late 1913, reformers of different political stripes agreed that structural financial reform was a priority. They converged on a plan to develop a discount or acceptance market in the United States so that banks no longer needed to rely on the New York call market for the placement of their liquid funds. The lessons that they distilled from history taught them that radical financial reform was both necessary and possible. Thus, they believed that the United States needed to overcome the legacy of its own financial past and could adopt financial practices that grew out of Europe’s past without living through it.

2. DESIGNING & IMPLEMENTING POLICIES FOR REFORM

Of the mechanisms for achieving financial reform that the Federal Reserve Act (FRA) introduced, changes in banking rules had the most immediate and straightforward impact. The FRA introduced new reserve rules that reduced the overall level of reserves held by US member banks and mandated that they be held in non-interest-bearing balances with Reserve banks. The change was expected to reduce the pyramiding of bankers’ balances in central reserve cities and, thus, the systemic pressures to place huge amounts of liquid resources in New York’s call market.³⁵ The Act also changed banking rules to promote the use of dollar acceptances, giving member banks the power to accept time bills of exchange used in the financing of foreign trade and to operate branches and to own banks in foreign countries to facilitate the development of the type of international banking networks that had supported the use of sterling bills.

Besides these rule changes, the FRA created new policy instruments through the powers it bestowed on the Reserve banks to discount and purchase paper. These powers were to be exercised in pursuit of the Fed’s monetary policy but they were also intended to serve as levers of financial reform. That can be seen in the way they were formulated in the Act and, specifically, in the privileged position given to “notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes”, relative to call loans, in the exercise of these powers. The only securities deemed eligible for discount or purchase by the Reserve banks were those issued by the US government but in 1913 nobody expected them to be important.³⁶

The limitations on the discount and purchase of paper by the Reserve banks were supposed to enhance the attractiveness of acceptances relative to call loans for US banks and, therefore, promote the US acceptance market as a viable alternative to the New York call market. Still, even if the legislation defined the basic principles of discounting and purchasing by the Reserve banks to promote financial reform, it gave no guidelines on the rates at which, or the extent to which, Reserve banks would engage in discounting or open market operations. Thus, it was left to the men appointed to positions of responsibility in the newly established Federal Reserve System to determine how to use their newly acquired powers. In designing policy, they had to decide not

³⁴ “Owen Says Banks Aid Stock Gambling”, *New York Times*, 25 November 1913, 7.

³⁵ U.S. Comptroller of the Currency, *Annual Report*, (Washington D.C., 1915), vol. 1, 3, 20.

³⁶ Thus, Section 13 of the FRA stated that: “[u]pon the indorsement of any of its member banks” any Reserve bank “may discount notes, drafts, and bills of exchange arising out of actual commercial transactions; that is, notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes”. At the same time, Section 13 discriminated explicitly against loans on stock exchange collateral, noting that credits eligible for discounting “shall not include notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities”. Insofar as the Reserve banks’ purchase of paper in the open market was concerned, the FRA applied similar rules with respect to the eligibility and ineligibility of different types of paper (*Federal Reserve Act*, 16).

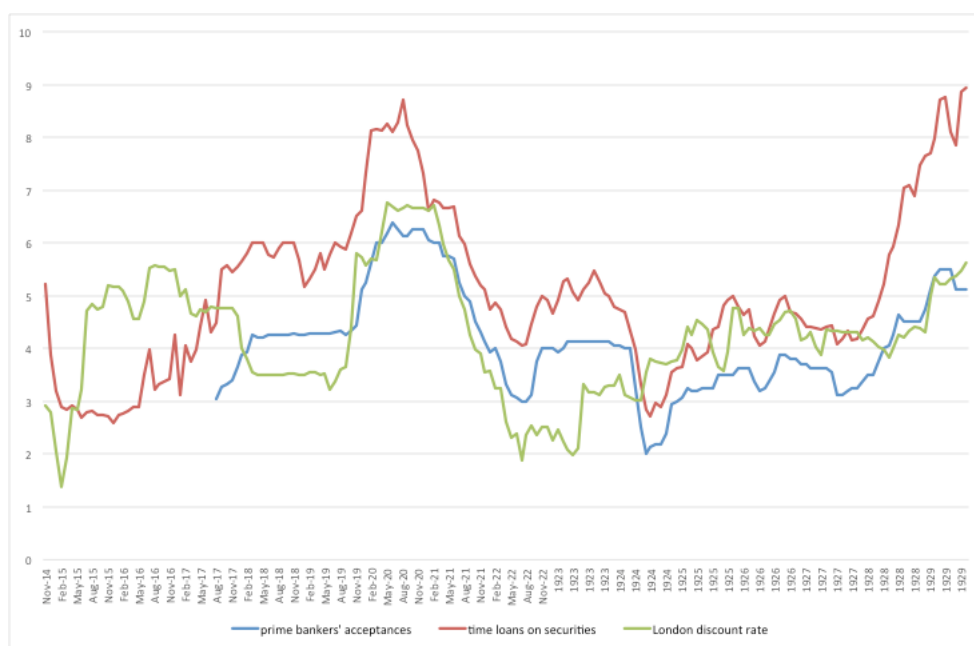
only how to pursue financial reform but also what importance to accord it relative to monetary objectives.

2.1 Aggressive Policies to Stimulate Supply

Some of the most prominent officials in the early Fed – especially Benjamin Strong at the Federal Reserve Bank of New York (FRBNY) and Paul Warburg, vice-governor of the Federal Reserve Board (FRB) and subsequently president of the Federal Advisory Council – displayed an extremely strong commitment to promoting the financial reform envisaged by the FRA. They invoked the enormous challenges facing the US in developing an acceptance business as justification for aggressive policy action by the Fed. As Strong emphasised repeatedly, the US was a laggard in a business in which Britain, with its long-established discount market, represented a formidable incumbent.³⁷

To build a discount market that could rival that of London, therefore, Strong insisted that the US had to overcome numerous obstacles to generate a sufficient supply of, and demand for, dollar acceptances.³⁸ Given such formidable hurdles, Strong was adamant that the Federal Reserve System had to aggressively promote a US acceptance market and Warburg fully supported him in this regard. In practice what that meant, given the policy instruments that the FRA had created, was determining how to use the discount and purchase of paper to influence the discount or interest rate on acceptances.

Figure 1: Interest Rates on the US Money Market



Source: author's analysis based on data on NBER Macrohistory: XIII. Interest Rates, <http://www.nber.org/databases/macroeconomy/contents/chapter13.html>

That created a dilemma since, as Strong acknowledged to banker, James Brown, there was a potential conflict between stimulating the supply of, and demand for, acceptances. Insofar as supply was concerned, there was a need for low rates to make the use of acceptance credit as

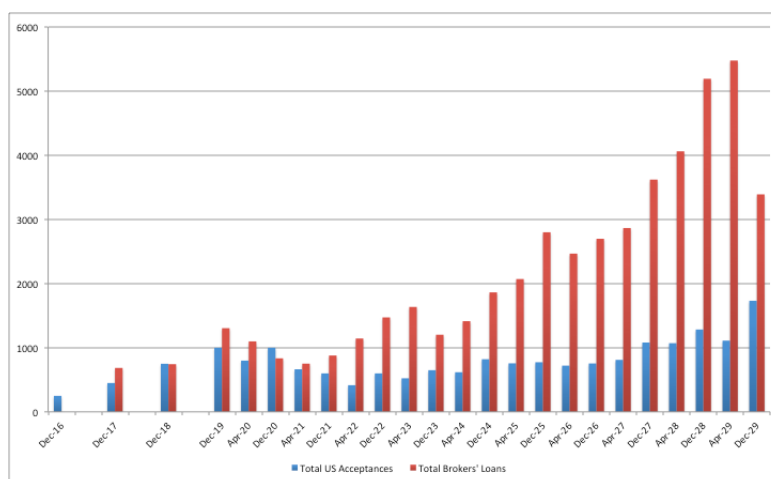
³⁷ Archives of the Federal Reserve Bank of New York, 440, Acceptances, 1917-1926 (hereafter Acc_1), Strong to Treman, January 10, 1917.

³⁸ Acc_1, Strong to Treman, January 11, 1917.

attractive as possible: “[t]he first object is to create a volume of bills drawn on New York, Boston and Philadelphia, not only dollar volume but volume in names and numbers of acceptors. This demands development of accepting machinery. We have credit to sell; if we keep the price of that credit low enough other money centers cannot compete with us”. However, “somewhat conflicting with it” was the challenge of stimulating demand, “to increase the number of buyers” since what they wanted was as high an interest rate as possible.³⁹

Faced with this inherent conflict, Strong was sure that priority should be given to stimulating the supply of acceptances since “with 30,000 incorporated banks, some private banks, and other potential buyers, the demand side will develop if the supply is encouraged”. To that end, FRBNY officials took the lead in applying low rates in the rediscounting of acceptances “to make our rate, and keep it, so much below the London rate that institutions the world over are forced even against their will to open New York credits”.⁴⁰ Indeed, Strong wanted rates to be so low: “that the pressure on drawers of bills becomes irresistible” and insisted that “it is practically our only leverage”.⁴¹ As far as demand was concerned, Strong believed that: “[o]ur first problem is to develop volume of bills, and you may be sure that the market for good bills will take care of itself. It will develop almost over night with astonishing rapidity whenever rates for that class of paper are permitted to advance”.⁴²

Figure 2: Size of the US Acceptance Market, millions of 1926 US dollars



Source: author’s analysis based on data from FRBNYA, Acc_1

Notwithstanding Strong’s confidence, his policy was initially slow to have its intended effect of stimulating the supply of US acceptances. Even with low discount rates, very few member banks came to the FRBNY, or any other reserve bank, with acceptances to be rediscounted. The FRBNY soon resolved its dilemma, however, by increasingly relying on open market operations, which gave it the latitude to seek out and buy acceptances not only from member banks but from

³⁹ Cited in Lester Chandler, *Benjamin Strong, Central Banker*, Washington, D.C., 1958, 91. James Brown was a partner in private bank, Brown Brothers and Company.

⁴⁰ Acc_1, Strong to Treman, January 10, 1917. When the Federal Reserve System opened for business, discount rates were relatively high at 5.75 per cent but, as soon as conditions in the money market stabilised, rates were brought down to 3.75 per cent by mid-1915 and stayed at that level until September 1917. And, as Figure 1 shows, that brought them far below rates in London as Strong intended.

⁴¹ Acc_1, Strong to Treman, January 11, 1917 ; see also Archives of the Federal Reserve Bank of New York, Benjamin Strong Papers, (hereafter BSP), Strong to FRB, January 11, 1917.

⁴² Acc_1, Strong to Treman, January 11, 1917.

private banks and trust companies too.⁴³ By early 1917, Strong believed that the FRBNY's policies were starting to bear fruit, pointing to the growth in US acceptances outstanding, shown in Figure 2, as evidence of the policy's success. Moreover, Strong was convinced it proved him right in assuming that demand for acceptances would be forthcoming. He wrote to Paul Warburg to say:

The experience of the last month or two has, I believe, demonstrated beyond question the accuracy of the statement I made to you some time ago – that there would never be any difficulty in developing a nation-wide market for bills and at very acceptable rates, whenever the Reserve Banks withdrew; they are being purchased by banks all over the United States.

Far from suggesting any easing of this policy, however, Strong called for still lower Federal Reserve buying rates. As he told Warburg: "I think we should advertise our rates as being the lowest in the world, as being the steadiest in the world, and make the New York market so attractive that the business will come willy-nilly".⁴⁴ To that end, he advocated "a little stronger policy in both buying bills and holding the rate a trifle below 3 per cent, if possible", explaining that "I really think we are making a mistake in maintaining rates quite as high as they are".⁴⁵

2.2 Mounting Criticism of Policies for Reform

Yet, even as Strong dug in his heels on policy design, some observers complained that low Federal Reserve buying rates for acceptances were undermining the demand side of the acceptance market. Critics expressed concern that the FRBNY was driving private investors away by forcing down rates on acceptances. They emphasised that the vast majority of acceptances was purchased by the FRBNY itself, something Strong himself acknowledged when he noted that "we are practically the only buyers in the market".⁴⁶ Still, he rebuffed calls for higher acceptance rates to stimulate demand, insisting that the encouragement of the supply of acceptances through cheap credit was the key to promoting the development of a US acceptance market.⁴⁷

Others were not so confident and in a detailed memorandum sent to the FRBNY in early 1918, the discount houses who made a market in acceptances, pointed to significant limitations on the supply and demand side of the market. Notwithstanding the FRBNY's policy of cheap acceptance credit, they claimed that "[t]he market lacks a steady supply of bills of diversified names and maturities".⁴⁸ Worse still, the discount brokers explained: "[t]he market lacks a steady demand from the largest purchasers of bills, that is banks, trust companies and other banking institutions".⁴⁹

At the time, the acceptance market was enjoying some relief from competition for investors' interest given that rates on call money had been capped at 6 per cent to facilitate the war

⁴³ Acc_1, Strong to E. W. Kenzel, June 8, 1917. Open market operations were initiated in February 1915 and were initially conducted in small amounts but there was a dramatic increase in their volume in 1916. By the end of that year, purchases of acceptances by the Reserve banks were more than three times the volume of bills they discounted.

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Acc_1, Strong to Treman, January 11, 1917.

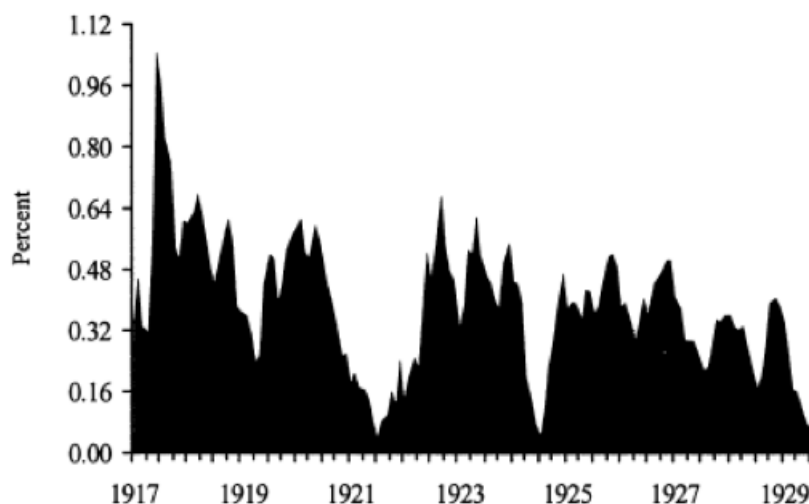
⁴⁷ See several letters between Treman and Strong (Benjamin Strong Papers, Federal Reserve Bank of New York, New York (BSP hereafter), Files 373414, 373415, 373416).

⁴⁸ Acc_1, Discount houses to FRBNY, March 19, 1918.

⁴⁹ Ibid.

effort.⁵⁰ After the war, however, the FRBNY faced increasingly virulent criticisms of its efforts to promote the US acceptance market that focussed not on the principle of financial reform but on the FRBNY's policy of cheap acceptance credit. With demand for acceptances continuing to languish, the claim that it was being undermined by the FRBNY's policy of cheap acceptance credit gained force inside and outside the Fed.

Figure 3: Federal Reserve Holdings of Acceptances, % of total outstanding



Source: Ferderer, 2003, Figure 3b, 679.

In early 1919 the FRBNY acknowledged that limited demand represented an obstacle to “the development of a broad and open discount market” and admitted that: “practically none of our members was purchasing this form of paper”. In response, it initiated “an active campaign to bring to the attention of our member banks the value to them of bankers acceptances as a safe, liquid and profitable investment for their surplus funds, and to offer our services in seeking purchases of bills for their account”.⁵¹ In late 1920, in discussing the “Broadening of the Market for Acceptances”, the FRBNY emphasised the strenuous efforts it had made to stimulate the demand for acceptances but acknowledged that: “there is much which may be yet accomplished to assist the further development of sales of bankers’ acceptances within this district and throughout the country”.⁵² In addition to its own initiatives, the FRBNY “cooperated closely” with the American Acceptance Council (AAC), run by Paul Warburg, “in its extensive program to educate bankers and other investors in general on this subject”.⁵³

Notwithstanding the FRBNY's willingness to promote educational campaigns for bankers, it refused to contemplate any change in its policy of cheap acceptance credit to redress the problem of demand for acceptances.⁵⁴ That stance became more controversial, however, as changing conditions in the US money market placed further pressure on the demand for US acceptances. The war's end temporarily sapped the call market of its energy but, from the summer of 1919, a speculative boom on Wall Street prompted a sharp increase in rates and a

⁵⁰ On September 5, 1917, the US government created the “Money Committee”, chaired by Benjamin Strong, to ensure the successful flotation of government loans (Lester Chandler, *Benjamin Strong, Central Banker*, Washington, DC, 1958), 124–31; O'Sullivan, 337–339).

⁵¹ Acc_1, Memorandum from Mr. Jay to R. M. O'Hara, November 30, 1920.

⁵² Acc_1, Memorandum from Mr. Jay to R. M. O'Hara, November 30, 1920.

⁵³ Ibid.; “Plan Campaign for Trade Acceptances”, *New York Times*, Jan 22, 1919, 16.

⁵⁴ Even if it bought and discounted bills in more limited volumes than before. Bills bought – rose as high as \$380 million in October 1918 and in November 1918 but then fell to about \$180 million in April and May 1919. Bills discounted were at \$280 million in Dec 1918 but then fell to \$230 million by June 1919.

huge influx of money to be lent on call. As call rates increased to 200 basis points above acceptance rates, the FRBNY's policy of cheap acceptance credit for promoting the US discount market became much more controversial.

In a letter to the FRBNY on November 20th, 1919, the discount houses insisted: "the time has come when there should be some relief from the artificial conditions which the Federal Reserve System has placed around the discount market".⁵⁵ The discount houses' criticism was echoed elsewhere, including on the Federal Reserve Board itself, as Albert Strauss made clear in a letter to E.R. Kenzel of the FRBNY:

This whole question of a market for bankers' acceptances is one which is giving much concern to the Board. It seems to me, personally, that a broad market for acceptances can, in the long run, be created only if the rates at which acceptances sell are such as to make them a profitable form of investment for banks and institutions desiring to hold investments of a strictly liquid character. I can understand that in the early days of the System and in order to induce a community unaccustomed to the negotiation of acceptances to introduce this form of negotiable instrument, it might have been desirable to make rates unduly favorable to the drawer, but it seems that in the long run a market of this kind can only be maintained if rates are such as to appeal, on the basis of self-interest, to a broad circle of buyers.⁵⁶

Given such concern, the matter was referred to the Federal Advisory Council (FAC), and its conclusion "that the policy of the Federal reserve banks at this time should be to leave the open market for bankers acceptances to member banks and discount houses" represented a major headache for the FRBNY.⁵⁷ In Strong's absence it was H. J. Case, as acting governor of the FRBNY, who replied to FRB Governor Harding to disagree with the conclusion of the FAC "as we are convinced that if the support of the system or of this bank were withdrawn from the open market in the present state of its development, its collapse would inevitably result".⁵⁸

By then, the FRBNY was facing a new critique of its cheap acceptance policy, notably for its incompatibility with the tightening of monetary policy deemed necessary if the Fed was to bring credit conditions under control. The Assistant Secretary of the Treasury, Russell Leffingwell, challenged Strong for the inconsistency of his calls for monetary stringency with the FRBNY's policy of "continuing to buy at artificially low rates all the bills offered in the New York market".⁵⁹ Prompted by Leffingwell's criticism, Governor Harding of the FRB wrote to Strong the same day to tell him that: "the Board had felt for some time that the New York buying rate on acceptances was too low".⁶⁰

Called upon to explicitly defend the policy of the FRBNY, Strong reminded Harding that "[f]rom the very beginning of the Federal Reserve System, when bankers acceptances began to appear in the market, it was deemed necessary to establish a more favourable rate either for the discount of these bills by member banks or for their purchase in the open market" in order "to stimulate a necessary banking development in the country".⁶¹ He insisted that "[t]he policy of the Reserve Banks in this respect has, I believe, been successful in developing this field of banking in the short period of a few years, whereas had we not stimulated the business, it would have had only

⁵⁵ Acc_1, Discount houses to FRBNY, November 20, 1919.

⁵⁶ Acc_1, Albert Strauss, FRB to E. W. Kenzel, December 24, 1919.

⁵⁷ Acc_1, Federal Advisory Council to the Federal Reserve Board, X-1837, February 18, 1920. Warburg was not yet a member of the FAC, serving on it from 1921 to 1926.

⁵⁸ Acc_1, H.J. Case, Acting Governor of the FRBNY, to Federal Reserve Board, February 25, 1920.

⁵⁹ Chandler, *Strong*, 161.

⁶⁰ BSP, Harding to Strong, November 24, 1919; Chandler, *Strong*, 162.

⁶¹ BSP, Strong to Harding, December 17, 1919. Strong also pointed out "that this particular type of paper was a better asset than any other line of commercial paper".

a negligible development”.⁶² And, in a letter to Leffingwell, Strong emphasised that the effectiveness of US monetary policy “depends upon the development in the market of an adequate volume of bills (as distinguished from commercial paper) so that the Bank, by voluntary purchases or by refraining from making purchases, can exercise a primary control over the money market which it could not possibly exercise without such a volume of paper that may be purchased, or not purchased, at will”.⁶³

Notwithstanding Strong’s vigorous defence, the New York reserve bank was forced onto the defensive by criticisms of its acceptance policy. It raised its minimum buying rate for open market purchases of acceptances from 5 to 6 per cent between December 1919 and September 1920 and its acquisitions of acceptances plummeted. Yet, it soon became clear that the FRBNY had no intention of giving up on the US acceptance market. If anything FRBNY officials had become even more concerned about “the future of the American discount market and American banker’s credits” and, once interest rates in the US economy were lowered from May 1921, these officials redoubled their efforts to promote acceptances through cheap credit.⁶⁴

In setting US acceptance rates to make them “irresistible” to drawers of bills, the FRBNY saw itself as competing primarily with the London market. In the years immediately after the war, Great Britain’s macroeconomic difficulties had forced interest rates up, undermining London’s capacity to compete with New York in the financing of international trade.⁶⁵ By early 1922, however, as Kenzel of the FRBNY explained to the Reserve bank governors and Governor Harding, the US acceptance market faced “much stronger competition [from] sterling credit than we have heretofore experienced”. The problem was not just “the advantage that London enjoys over New York in the open market discount rate for bills” but also “the improved condition of sterling exchange”.⁶⁶ Kenzel warned that if dollar credits ended up being supplanted by sterling bills, it would take a long time for them to re-establish themselves and “all of the advantage of the past years would be lost”. To assist “in avoiding such a catastrophe for American credits”, Kenzel emphasised the importance of immediate action “with a view to assisting this market to lower levels of rates which would reduce this disadvantage of dollar credits as compared to sterling credits”.⁶⁷

That proposal was controversial, given its likely implications for acceptance demand. The deputy governor of the Federal Reserve Bank of Chicago predicted it would mean “that the Federal Reserve Banks will be practically the only market for the bills”. He recommended that US discount rates should be governed by supply and demand for acceptances in the United States and not in London and that “the Federal Reserve Banks should follow the market rather than take the initiative in making the rates”.⁶⁸

Rebuffing such concerns, as well as more virulent criticism, FRBNY officials continued to apply low rates on the discount and purchase of acceptances.⁶⁹ And they succeeded, as Figure 1 shows, in keeping US acceptance rates below their British counterparts for the rest of the 1920s. FRBNY

⁶² Ibid.

⁶³ BSP, Strong to Leffingwell, December 19, 1919.

⁶⁴ Acc_1, E. W. Kenzel to C. R. McKay, Deputy Governor of the Federal Reserve Bank of Chicago, March 7, 1922.

⁶⁵ Eichengreen and Flandreau, “Dollar as an International Currency”.

⁶⁶ Until it strengthened, he explained, the apparent advantage that London enjoyed as far as interest rates were concerned had been mitigated by ‘the cost of forward cover for the sterling credit’.

⁶⁷ Acc_1, E. W. Kenzel to C. R. McKay, Deputy Governor of the Federal Reserve Bank of Chicago, March 7, 1922.

⁶⁸ Acc_1, C. R. McKay, Deputy Governor of the Federal Reserve Bank of Chicago, to E. W. Kenzel, March 7, 1922.

⁶⁹ For a particularly heated controversy, see Acc_1, Gilbert, Undersecretary of the Treasury, to Case, Acting Governor of the FRBNY, May 25, 1923; June 9, 1923; FRBNYA, Acceptances, O’Hara to Case, May 31, 1923; see also Case to Gilbert, June 22, 1923.

officials vigorously defended their policies for promoting the acceptance market, insisting that: "The American discount market is still an infant compared with the veteran markets of Europe. It is only by slow steps of education and growth that we can hope for its maturity. The time has not yet come when it can stand on its own feet without reasonable aid from the reserve banks".⁷⁰ However, the problem of an anaemic demand for acceptances in the United States did not go away. And, as a scathing report from the FRB in March 1927 shows, neither did the criticisms of the FRBNY's policies to promote financial reform:

The real effect of the 'support' which is being given to the bill market is to make rates there so low that investors will not buy the few bills that are offered even though funds are plentiful. This is certainly not a policy that is calculated to build up a ready outside market where bills are freely traded and where investors are accustomed to bills as sources of employment for short time funds. Instead it is reducing the number of outside investors.⁷¹

3. THE CHALLENGES OF THE PRESENT

The main source of contention between policymakers and their critics, as we have seen, was the anaemic demand for acceptances in the United States. Following the enactment of the FRA, policymakers like Benjamin Strong were confident that the demand for good bills "will take care of itself". They believed that US banks and other investors, having learned their own lessons from the past, would relish the opportunity to place their funds in an acceptance market. They had reason to believe that given the views expressed by New York bankers in favour of financial reform prior to the passage of the FRA.⁷² Moreover, the history of discount markets in the pre-war period in Europe, and especially London, showed that ample demand for acceptances was forthcoming even at discount rates of just over 3 per cent.

However, US policymakers soon realised that their optimism had been misplaced. Indeed, it was their growing awareness of the lack of interest by member banks in investing in acceptances that persuaded them to launch an educational campaign to persuade banks that they were "a safe, liquid and profitable investment for their surplus funds". FRBNY officials looked further afield too, seeking legal changes that would permit other financial institutions, such as savings banks, insurance companies, and trustees of estates, to place large amounts of their surplus funds in the acceptance market.⁷³ While the FRBNY was waiting for US financial institutions to show greater interest, it stepped in as the most important buyer of acceptances, and this was not the only way in which the FRBNY supported the demand side of the acceptance market, playing an active role too in financing the inventories of acceptances held by discount houses.

Once we take account of the FRBNY's holdings of acceptances on its own account, and the financial support it provided for discount houses' inventories, there is little evidence that US private investors were taking over the burden of sustaining the discount market. To the contrary, even as late as 1925, the FRBNY represented by far the most important source of demand for US acceptances as Figure 4 shows. US banks' holdings of acceptances, in contrast, remained stubbornly low at modest levels of only \$150 million or 20 per cent of total acceptances outstanding. As a result, it became harder to believe that the obstacle to building

⁷⁰ Acc_1, O'Hara to Case, May 31, 1923; see also Case to Gilbert, June 22, 1923.

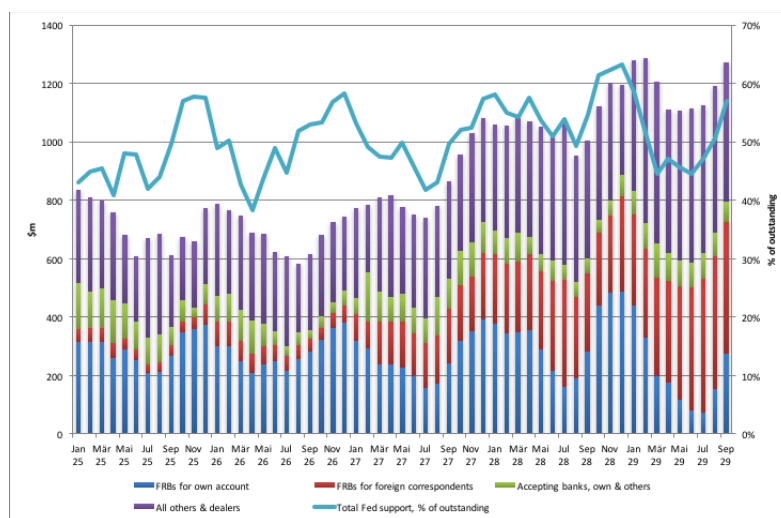
⁷¹ See, for example, FRB Archives, Mr. Goldenweiser, Miss Brown & Mr. Riefler, "The present condition of the bill market", March 9, 1927.

⁷² In 1913, Frank Vanderlip of National City Bank, the largest lender on call at the time, had testified that the call market was "a center of disturbance which may develop into a financial cyclone" and advocated reform "so that banks may have some other way of employing their secondary reserve than of loaning it on call against stock exchange collateral" (U.S. Congress, Senate, Hearings Before the Committee on Banking and Currency on H.R. 7837 (S. 2639), 62nd Congress, 1st Sess., (Washington, DC, 1913), 3 vols., 1947).

⁷³ Acc_1, Jay to Kenzel, April 20, 1918.

demand was a temporary one that could be overcome through educational programmes but that only begged the question of what was the nature of the obstacle that policymakers confronted.

Figure 4: Sources of Demand for US Acceptances



Source: American Acceptance Council, *Facts and figures relating to the American money market*, New York, American Acceptance Council, c1931

It is tempting to trace the problem back to the architects of the FRA and, specifically, to the way the invoked history to argue for the necessity and possibility of radical financial reform. The model for structural financial reform embodied in the Act was based on an analysis of the operation of the London money market but there is no doubt that reformers underestimated the extent to which that model relied on custom and practice that had developed through historical experience on the London discount market.⁷⁴ Moreover, they failed to anticipate how difficult it would be to transpose that model to a country where custom and practice was organised in such a different way around the operation of the country's call market. Thus, the architects of the Federal Reserve Act envisaged a process of financial reform that could be achieved by altering the risks and rewards of different types of market transaction. Instead, what they encountered were borrowers and lenders whose behaviour was much harder to change than they had imagined.

Certainly, policymakers appealed to what Strong characterised as US bankers' "long habit and a settled prejudice in favor of collateral loans" to explain why they "find it more convenient and believe it is normally more profitable to neglect the discount market and continue [sic] the Stock Exchange as practically the sole outlet for overnight and short funds which they have available".⁷⁵ As Kenzel explained to Governor Harrison in March 1929, the New York banks sustained the call market through the placement of their own liquid funds there and by habituating out-of-town banks, especially "the larger banks in the larger cities", to the advantages of the call market.⁷⁶ US banks' sustained interest in the call market seemed puzzling to FRBNY officials since call loans seemed so obviously inferior to acceptances for placing liquid funds:

⁷⁴ Battilossi, Stefano. "Money Markets" in Youssef Cassis and Catherine Schenk, eds., *Oxford Handbook of Banking and Financial History*, Oxford, UK: Oxford University Press, 2016: 221-233.

⁷⁵ Acc_1, Strong to Kenzel, August 17, 1918; Acc_2, E. R. Kenzel to Governor Harrison, E. R. Kenzel to Governor Harrison, Memo on Governor's Conference (April 1, 1929, Topic I, C), March 29, 1929).

⁷⁶ Ibid.

When the acceptance privilege was given to member banks it was believed they would welcome the opportunity of carrying substantial portfolios of bankers acceptances as secondary reserve, adjusting their reserve requirements from time to time by discounting short bills at the reserve banks. Only one bank in New York ever importantly followed that practice. They did it with entire satisfaction to themselves and found that they earned on the average through their portfolio quite as good rates as the average call money rate. Other important large banks have had the problem brought to their attention repeatedly by discount houses and the American Acceptance Council, but without material results.⁷⁷

And the only explanation they could offer to account for US banks' snubbing of the acceptance market was that they were used to something different:

it is easier for the New York banks to handle the Stock Exchange loan than the loan on bills. Their loan departments, where this work is done, are neither familiar with bills as collateral nor well equipped to handle them and it is the man in charge of the loan cage who generally has the effective control in the disposition of correspondents' funds.⁷⁸

Were this diagnosis correct, it would suggest that the problem of financial reform stemmed from the fact that the architects of the FRA had invoked history in a way that misrepresented the challenges of structural financial reform. However, New York bankers insisted that it was not merely the lure of "long habit" that explained the appeal of the call market in the post-Fed era. As John Rovensky of the Bank of America explained to FRBNY officials, little had been gained by their appeals to bankers to change their behaviour since "in every case the lure of additional profits in other directions has eventually drawn them back to their former practices". He argued that: "the only permanent way to create a real acceptance market is to make the acceptance a more attractive investment than it is at present".⁷⁹ Economists working on the acceptance market in the 1920s and 1930s expressed similar views. Writing in 1932, Beckhart argued that it was "only logical" that "various short-term money markets would compete, one against another, for the 'surplus' funds of the banking community" and that meant "the rate for bills must be high enough, on the average, to offer effective competition to call loans and short-term government obligations".⁸⁰

Once we explore the character of competition in the US money market in the 1920s, it becomes clear that unexpected changes that had occurred since the FRA was enacted meant that acceptances had to contend with unexpectedly vigorous competition from alternative short-term instruments – notably Treasury certificates and notes as well as call loans -- for the placement of their liquid funds. Thus, the main obstacle to bringing about financial reform along the lines envisaged in the FRA stemmed not so much from the lessons that had been learned from the past as from the fact that the present was not what the architects of reform had anticipated. However, policymakers remained so fixated on the past as a guide that they overlooked the potential implications for reform of these unexpected changes in the US money market. Thus, they responded with frustration to the failure of their efforts to achieve the financial reform envisaged by that Act without contemplating any serious alternative to it.

⁷⁷ Acc_2, Memorandum on the Present Condition of the Bill Market and Hindrances to its Further Development, December 27, 1928.

⁷⁸ Ibid.

⁷⁹ Acc_2, Rovensky to Governor Harrison, Jan 4, 1929.

⁸⁰ See, in particular, Benjamin Haggott Beckhart, "Federal Reserve Policy and the Money Market, 1923-1931", in Beckhart, James Smith and William Adams Brown, Jr., *The New York Money Market*, volume 4, *External and Internal Relations*, Columbia University Press, 1932. 578.

3.1 Unexpected Changes in the US Money Market

The challenge of competition from Treasury certificates and notes was emphasised shortly after the crisis of 1920-1921 by some of the Reserve banks. In early 1922, the vice-governor of the Cleveland bank insisted that there was still “a long road to hoe, especially in the establishment of markets and getting investors interested in bills in various markets”. What constrained domestic demand for acceptances, he explained, was that “present rates are not attractive, and consequently funds are being diverted to other uses”, emphasising that “[t]his is particularly true of public funds for which bankers not only in this district but in others seem to be yielding rates which prohibit their investment in bankers’ acceptances at present rates”.⁸¹ Echoing these concerns, his counterpart in Chicago warned that low rates on acceptances meant that funds are diverted to the “certificate market”.⁸²

These men were referring to the market for certificates and notes issued by the U.S. Treasury. The US government relied on a major increase in its borrowing to finance the war effort and even as it reduced its overall debt burden in the post-war years, it continued to issue significant amounts of short-term certificates of indebtedness and notes for refinancing purposes.⁸³ Under the terms of the FRA, these short-term government securities ranked alongside acceptances as eligible securities for member banks in borrowing from their Reserve bank but, initially, there was no liquid market for them. However, by the second half of 1920, as Garbade explains, an active over-the-counter market had developed in Treasury certificates of indebtedness and notes.⁸⁴ And by 1922, as officials from the mid-Western Reserve banks attested, the market for short-term governments was sufficiently attractive to financial institutions across the United States to make it a serious competitor to the acceptance market for the placement of their liquid funds. By the late 1920s, member bank holdings of short-term Treasuries amounted to \$1.3 billion, an amount that was equivalent to the entire volume of the US acceptance market and ten times or more the amount placed by member banks there.⁸⁵

The comparison of short-term government securities and acceptances, shown in Table 1, helps us to understand their respective appeal to US investors. There was little to separate them in terms of volatility since their coefficients of variation were similar to each other and even slightly lower than sterling acceptances before and after the war. In terms of yield, in contrast, US acceptances seemed to have a slight advantage, with an average yield of 4.15 per cent compared with 3.81 per cent for short-term governments. However, governments were tax-exempt, whereas acceptances were not for most of the 1920s, so they generated higher returns than acceptances when tax rates were higher than 8 per cent, as they were for corporations and most households in the 1920s.⁸⁶

However, the market for short-term government securities was not the only competitive threat to acceptance demand by the early 1920s. Writing in 1915, the *Bankers’ Magazine* observed that:

⁸¹ Acc_1, Fancher to Kenzel, March 1, 1922.

⁸² For echoes of his concerns, see Acc_1, C. R. McKay, Deputy Governor of the Federal Reserve Bank of Chicago, to E. W. Kenzel, March 7, 1922.

⁸³ George J. Hall & Thomas J. Sargent, *Complications for the United States from International Credits, 1913-1940*, June 18, 2019.

⁸⁴ Kenneth D. Garbade, *Birth of a Market : The U.S. Treasury Securities Market from the Great War to the Great Depression*, MIT Press, 2012, chapter 13, 185.

⁸⁵ Board of Governors of the Federal Reserve System, *Banking and Monetary Statistics, 1914-1941*, Washington, D.C., 1976, 77 ; American Acceptance Council, *Facts and figures relating to the American money market*, New York, American Acceptance Council, c1931.

⁸⁶ A tax rate of 8 per cent makes 3.81 per cent equivalent to a taxable yield of 4.15 per cent. For tax rates in the 1920s, see Gene Smiley & Richard Keehn, “Federal Personal Income Tax Policy in the 1920s”, *Journal of Economic History*, 55, No. 2 (June 1995).

“[i]t was assumed, when the Federal Reserve Act was passed, that by making only commercial paper available for rediscount, and denying this privilege to paper representing stock transactions, the banks would find it difficult to procure funds for speculative uses”.⁸⁷ Against all expectations, however, there was no systematic weakening of the call market when the Federal Reserve System came into operation.⁸⁸ Even when the call market’s post-war boom turned to bust, it did not drive investors away for long. Instead, they regarded the crisis as a crucial test of the call market’s stability in a new post-Fed era. And when there was no drama that approximated the emergency measures taken in earlier crises, it seemed possible that the call market might have broken with its history of instability. Thus, when the crisis was over, US bankers and other investors channelled funds back into the call market and by late 1921 the call market dominated the acceptance market in terms of volume. What followed, as Figure 2 shows, was a sharp upward trend in the volume of brokers’ loans, with only a brief reversal in late 1923. Far from displacing the call market as the primary outlet for the placement of banks’ liquid funds, as the architects of the FRA had expected, the US acceptance market was struggling to compete with it.

Table 1: Returns and Volatility in the US Money Market, 1900-1929

Money Market	1900- June 1914	1919-Sept 1929
<i>London Discount, 3 month bills</i>		
Average	3.24%	4.21%
Coefficient of variation	0.30	0.28
<i>NY Discount, 90 day</i>		
Average	n.a.	4.15%
Coefficient of variation	n.a.	0.24
<i>US Call Market, 90 day</i>		
Average	3.70%	5.44%
Coefficient of variation	0.74	0.28
<i>US Call Market, renewal/ new</i>		
Average	3.70%	5.35%
Coefficient of variation	0.69	0.33
<i>US Treasury Notes and Certificates, 90-180 day*</i>		
Average	n.a.	3.81%
Coefficient of variation	n.a.	0.25

* Jan 1920-Sept 1929

Source: author's analysis based on monthly data from Macrohist (<http://www.nber.org/databases/macrohstory/contents/chapter13.html>).

A comparison of the peacetime years before and after the passage of the FRA, shown in Table 1, confirms the impression of a break with the past in the operation of the call market. Before the Act came into force, higher rates could be generated by placing money on the US call market, compared with the London discount market, but the premium was only about 14 per cent and it came at the expense of substantially higher levels of volatility. After the war, in contrast, the call market offered much higher premia of 29 per cent compared to the London discount market and 31 per cent over its New York counterpart. More striking still is the fact that these premia seemed to be attainable without assuming any greater volatility.

Ironically, therefore, the legislation that had been expected to lead to the demise of the call market contributed to its persistence by seeming to stabilise it. It is true that the FRA prevented the Fed from re-discounting call loans for its member banks or intervening directly on the call market. However, it soon became clear that member banks could respond to pressures in the call market by rediscounting eligible securities that they had on their balance sheets. As Strong

⁸⁷ "The Wave of Speculation", *Bankers' Magazine*, November 1915, 595.

⁸⁸ H. Parker Willis, 1922, "The Federal Reserve System – A Retrospect of Eight Years", *Political Science Quarterly*, 37, 569.

acknowledged early on: 'The eligible paper we discount is simply the vehicle through which the credit of the Reserve System is conveyed to the members. But the definition of eligibility does not effect the slightest control over the use to which the proceeds are put'.⁸⁹ That meant that banks had more options than the FRA had envisaged but it meant too that Federal Reserve policy had some indirect influence on lending conditions on the call market.⁹⁰ Of particular importance, as Table 1 suggests, is that the Federal Reserve System stabilised the call market, inadvertently rendering it a more attractive alternative to the acceptance market than anyone had anticipated.

3.2 Frustration & Desperation

By the early 1920s, FRBNY officials were well aware of the fact that unexpectedly vigorous competition from the market for short-term government securities and the call market represented a major obstacle to their efforts to build demand for US acceptances. The frustration they felt is palpable in an internal FRBNY memorandum, written in the summer of 1923, which characterised their dilemma in the following terms:

We must, however, recognise facts, and the fact of the matter is that the acceptance market is far from being fully developed. There are many conflicting factors which operate against a healthy development. When rates are low, the supply tends to increase but the demand dries up in competition with other forms of short term investments carrying higher rates, such as government certificates, stock exchange call loans, etc. When rates rise to a point out of line with the cost of other forms of money or credit, an active demand develops but the supply diminishes as it is cheaper to finance by other methods or through other money centers. Under these circumstances the development of this discount market is between the devil and the deep sea.⁹¹

The primary route that they envisaged to escaping this dilemma was to try to undermine the instruments that competed with acceptances for investor interest.

The damaging effects of competition from tax-exempt government certificates were emphasised in an internal FRBNY memo in the early 1920s and Strong and Warburg subsequently corresponded about what might be done about it.⁹² Then Warburg wrote to the Treasury to complain that the unfavourable tax status of acceptances "prevents the banks from entering the field and, thereby, destroys the effective cooperation of, what should be, the most important factor in the acceptance market, and it prevents acceptances from getting the lower interest level, which they should command". He asked that: "either the Treasury Certificates and Notes should be placed on a taxable basis, or acceptances should be placed on a tax-exempt basis when held by banks", arguing that extending tax-exempt status to acceptances would cost little money and would "make the American banking system a success and put Uncle Sam on the map as the real 'World Banker' with a fairly perfect machine".⁹³ The Treasury replied that "[w]e should like to do everything we can for the acceptance market" but explained that it "would put the Treasury in a false light to recommend tax exemption [for acceptances]".⁹⁴ Not to be outdone, Warburg pursued other channels to achieve his objective, eventually persuading the Federal Advisory Council to recommend that acceptances be made exempt from the Federal corporation

⁸⁹ Chandler, *Strong*, 197-8.

⁹⁰ Carlson, Mark, and Burcu Duygan-Bump. "The Tools and Transmission of Federal Reserve Monetary Policy in the 1920s," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, November 22, 2016, <https://doi.org/10.17016/2380-7172.1871>.

⁹¹ Acc_1, O'Hara to Case, May 31, 1923.

⁹² Acc_1, E. W. Kenzel to C. R. McKay, Deputy Governor of the Federal Reserve Bank of Chicago, March 7, 1922; BSP, Strong to Warburg, December 3, 1923.

⁹³ BSP, Warburg to Garrard B. Winston, Assistant [sic] Secretary of the Treasury, December 20, 1923.

⁹⁴ BSP, Garrard B. Winston, Under Secretary of the Treasury, December 26, 1923.

income tax.⁹⁵ That recommendation was accepted and, finally, on May 29, 1928, a tax exemption for acceptances took effect.⁹⁶ However, by early 1929, US banks' holdings of acceptances were still only \$150 million while their holdings of Treasury certificates and notes amounted to more than \$1.3 billion.⁹⁷

Besides, as policymakers were only too well aware, the more formidable threat to the demand for acceptances came from the call market. By early 1929, member banks' loans on securities to brokers and dealers amounted to nearly \$3 billion.⁹⁸ Inside the FRBNY, officials explicitly invoked the vigour of the call market, this "peculiar American feature of financial organization" as Willis described it, to account for the difficulties in building a discount market in the United States compared with Britain.⁹⁹ Indeed, by the early 1920s, they took the view that the only way to build a discount market in the United States would be "if we could only get away from the Stock Exchange call loans as the principal outlet for excess bank reserves".¹⁰⁰

To this end, the FRBNY had advocated the move to a system of term settlements for security transactions on US stock exchanges to diminish the importance of the call market, in line with earlier efforts made by Paul Warburg through the American Acceptance Council.¹⁰¹ However, these demands had come to nought, with the New York Stock Exchange refusing to consider such a radical change in its system of settlement. Thus, FRBNY officials became increasingly fatalistic about their chances to counter the competitive threat posed by the call market as the 1920s unfolded.

Critics urged FRBNY officials to raise acceptance rates to stimulate demand. Exemplifying that logic, Beckhart claimed that: "[t]he real remedy [for the discount market] would seem to lie in a change of attitude on the part of the Federal Reserve banks, which would allow bill rates to seek their own competitive levels" and he added that: "until the Reserve banks remove their support, the discount market will not be on a sound foundation".¹⁰² However, FRBNY policymakers had never been convinced that increasing acceptance rates to boost demand was the solution to building a viable acceptance market, believing it would dampen supply in competition with London and other financial centres. And concerns about competition on the supply side of the market only increased as the 1920s unfolded with London bankers slashing their commissions to attract acceptance business and competition increasing from other European financial centres.¹⁰³ Moreover, unfavourable conditions for trade in global commodities in the second half of the 1920s meant that the overall outlook for acceptance financing looked increasingly gloomy.

It is little surprise, therefore, that US policymakers continued to express frustration at being caught between "the devil and the deep sea" in their efforts to create a viable acceptance market. Rather than giving up on financial reform, however, they identified an audacious but desperate route to bolstering the demand for acceptances by turning to foreigners to circumvent inhospitable domestic conditions. The main instrument of the new policy orientation was the targeting of the balances of foreign central banks for investment in US acceptances. As early as 1917, the Federal Reserve System had created the possibility for reserve banks to have foreign

⁹⁵ On September 17, 1926.

⁹⁶ Beckhart, 428.

⁹⁷ Banking and Monetary Statistics, 76-77.

⁹⁸ Ibid., 76.

⁹⁹ Willis, H. Parker, 1922, 569.

¹⁰⁰ Acc_1, Acceptances, Case to Gilbert, June 22, 1923.

¹⁰¹ American Acceptance Council, *Annual Report*, First Annual Meeting, December 4, 1919 (New York, 1920), 5).

¹⁰² Beckhart, 462.

¹⁰³ Acc_1, Kenzel to Jay, November 29, 1926.

central banks as correspondents and the FRBNY was assigned responsibility for the system's initial relationship with the Bank of England. By 1920 the FRBNY was holding balances on deposit for several central banks, and placing them in the acceptance market, but the amounts involved remained small through 1923.¹⁰⁴ From March 1924, however, there is evidence of a more strategic approach to the correspondent balances of foreign central banks in a letter from Paul Warburg to Owen Young.

Young was working with Charles Dawes on his eponymous plan to overcome the reparations crisis in Germany and stabilize its currency. Warburg told Young that the crisis offered an extraordinary opportunity for the US dollar "to permanently retain a predominant position" vis-à-vis the pound sterling. And he emphasised how the accumulation of central banking reserves, denominated in US dollars, might help to circumvent the frustrations of trying to build a US discount market based on domestic initiatives:

Personally, I can envisage, that if through the establishment of gold exchange standards in Europe, many countries carry their reserves over here, and invest them in bankers acceptances and balances, the result of that would be the development of a wide open discount market, such as we have been trying in vain for five years to establish over here.¹⁰⁵

The FRBNY was to turn Warburg's vision into reality in the ensuing years, soliciting correspondent relationships with foreign central banks and then privileging the acceptance market in placing their deposits in the US money market. By early 1927, as Figure 4 shows, such purchases had reached more than \$100 million, and they rose to almost \$400 million by mid-1928. By then, they far outweighed the purchases of acceptances by US commercial banks and even rivalled the FRBNY's purchases of acceptances for its own account.

3.3 An Acknowledged and Significant Failure

The effectiveness of FRBNY's foreign salve for a domestic problem has led some researchers to conclude that efforts to build a US acceptance market were a success. Peter Ferderer, for example, emphasised that "reserve bank support of the discount market diminished over the 1920s and early 1930s" to substantiate his claim that the US acceptance market was an example of successful institutional innovation. Although Ferderer acknowledges that foreign investors were "heavy buyers of bills by the late 1920s", he does not recognise that these purchases were channelled by the New York reserve bank in a deliberate attempt to bolster the demand side of the US market for acceptances. When we allow for that fact, it is apparent that total FRBNY purchases amounted to more than 50 per cent of the total volume of acceptances by the late 1920s, making the market heavily dependent on its support for its survival as, indeed, Flandreau and Eichengreen emphasise.¹⁰⁶

Bankers openly acknowledged the failure of the anticipated revolution in the money market in the late 1920s. Writing to Governor Harrison of the FRBNY in early 1929, Rovensky of Bank of America noted that: "[i]t is generally admitted that present conditions are unsatisfactory and have been more or less so ever since the acceptance business started".¹⁰⁷ Far from denying Rovensky's claim, Harrison found it "gratifying to have someone as well conversant with the facts" offer proposals for dealing with "this puzzling problem of the future of the bill market in

¹⁰⁴ Beckhart, 427. In these arrangements, the FRBNY guaranteed the bill or added its endorsement so we can track the amounts involved in the contingent liability that the reserve banks disclosed in their statements of condition.

¹⁰⁵ BSP, Paul Warburg to Owen D. Young, March 21, 1924.

¹⁰⁶ In measuring Fed support for the dollar acceptance market, Eichengreen and Flandreau include acceptances purchased by the Fed for foreign correspondents but without offering any explicit justification for doing so.

¹⁰⁷ Acc_2, Rovensky to Governor Harrison, Jan 4, 1929.

this country, with which we are much concerned".¹⁰⁸ The Conference of Governors of the Reserve banks went even further in March 1929, noting that "A broad survey of the experience of the last ten or twelve years shows that there has never been a true bill market in this country but that it has been sustained largely by the Federal Reserve Banks and by the foreign central banks investing through the Federal Reserve System, and that it is probable much of the buying of the bills through other sources is also for the account of foreign banks". Most devastating of all is the hopeless lesson that the Governors drew from this experience: "While it was the consensus of opinion of the Governors present that the development of an American bill market is desirable... it appeared to be the sense of the conference that there is little else that the Federal Reserve Banks can do under existing conditions to facilitate a broader distribution of bills".¹⁰⁹

It is worth emphasising, moreover, that the failure involved was not merely a failure of financial reform. After all, one of the key justifications for building a viable acceptance market in the United States was its potential value as an instrument of monetary policy. As one FRBNY official put it: "the successful operation of the reserve system in the future will very largely, if not most importantly, depend upon the existence of an American discount market which will function normally".¹¹⁰ However, the US acceptance market, as it was constituted in the 1920s, was completely ineffective as an instrument of monetary policy. With such a small amount of acceptances held by member banks, their rediscount or purchase by the Reserve banks was a feeble lever for influencing credit conditions in the United States. Moreover, the geographic scope of such an expansionary policy was limited by the fact that most of these acceptances were held by New York banks.¹¹¹

As the 1920s unfolded, FRBNY officials implicitly acknowledged the problem by looking beyond the acceptance market when it sought to use open-market operations as a vehicle for counter-cyclical monetary policy. With the creation of the Open Market Investment Committee, short-term Treasuries were explicitly recognised as a legitimate vehicle of the Reserve banks' open-market operations. Thereafter, the Federal engaged in significant open-market operations in short-term Treasuries and their use as a lever for controlling credit conditions was clearly acknowledged by Benjamin Strong but he made it clear in testimony before the Banking and Currency Committee of the House of Representatives in April 1926 that short-term governments were a temporary expedient "until we have a larger volume of bills in the New York market which might serve to perform the same function that these short Treasury certificates do".¹¹²

There is no doubt, therefore, that FRBNY officials were quite flexible in taking advantage of actual, rather than expected, conditions in the US money market. What seemed more difficult for policymakers to grasp, however, was the possibility that the unexpected changes in the US

¹⁰⁸ Acc_2, Harrison to Rovinsky, Jan 9, 1929; see, especially, Acc_2, E. W. Kenzel to Governor Harrison, Memo on Governor's Conference (April 1, 1929, Topic I, C), March 29, 1929.

¹⁰⁹ Archives of the Board of Governors of the Federal Reserve System (FRBA hereafter), Mr McClelland to Federal Reserve Board, Broadening of Bill Market, May 13, 1929.

¹¹⁰ Acc_1, O'Hara to Case, May 31, 1923; see also Case to Gilbert, June 22, 1923.

¹¹¹ The concentration of banks' acceptance portfolios in New York was understood by officials in the FRBNY with one report noting that New York member banks held 75 per cent of all acceptances held in US banks' portfolios in December 1925 (Acc_1, Kenzel to O'Hara, February 2, 1926). Michael Bordo and David Wheelock have suggested that the limited geographical scope of the acceptance market may have contributed to the Fed's widely-criticised failure as a lender of last resort in the Great Depression (Bordo, Michael and David Wheelock. "The Promise and Performance of the Federal Reserve as Lender of Last Resort" in Michael Bordo and William Roberds, eds. *The Origins, History, and Future of the Federal Reserve: A Return to Jekyll Island*, Cambridge & New York: Cambridge University Press, 2013: 59-98).

¹¹² U.S. Congress, House, Hearings before the Committee on Banking and Currency on H. R. 7895, 69th Congress, 1st Sess., (Washington, DC), 1926-1927, 449 ; see also FRBA, FRBNY, Answers to Questionnaire No. 9, Open Market Operations, February 25, 1931, 4, 15.

money market since the passage of the FRA suggested a more fundamental rethinking of the direction of financial reform envisaged in the legislation. To do so would have required them not only to abandon their long-standing efforts to promote the US acceptance market but also to harness the unexpected changes that had occurred in the US money market to create an effective instrument of monetary policy.

To modern eyes, the most obvious route to doing so would have been to look to the market for short-term government securities. As we have seen, US policymakers were already using open-market operations in short-term governments as an instrument of monetary policy in the 1920s and much the same was happening in central banks across the Atlantic. Yet, in approving policies to tighten or ease credit conditions, senior officials in the Fed showed a clear preference for open market operations in acceptances, viewing the purchase of Government securities as a last resort to be used only in the absence of sufficient liquidity in the acceptance market. Prominent historians have criticised them for this attitude but, as R. H. Hawtrey's *The Art of Central Banking* shows, there was considerable debate at the time among monetary economists as well as policymakers about the legitimacy of using government securities as a lever of monetary policy.¹¹³ Moreover, with the overall indebtedness of the Federal government in steady decline throughout the 1920s, it was difficult to envisage that the market for short-term governments would be large and liquid enough to play such a role in the United States. Indeed, even in 1926, Strong worried that there were too few short-term governments available: "it is the kind of security of which we can sell an almost unlimited amount in case of need, and we can buy very large amounts, but it is very much more difficult to buy them than it is to sell them".¹¹⁴

There are some tentative signs that FRBNY officials started to think in a new way about short-term governments towards the end of the 1920s. In January 1928, J. Herbert Case, the Deputy Governor of the FRBNY, was sent to London to study the British Treasury bill market. He reported back to Strong on how British practices with respect to short-term government financing might be adopted in the United States. Then, in early 1929, at the request of the Under Secretary of the Treasury, Ogden Mills, Case returned to London to do further research and on his return he submitted a report explaining how the British system worked and recommending the adoption of Treasury bills in the United States. As Garbade notes : "Case's plan set the framework for the introduction of a new instrument to American financial markets". However, even if the market for Treasury bills was to become the main instrument of US monetary policy, the primary motivation for their adoption in the United States, according to Garbade, was to resolve structural problems with Treasury financing rather than to envisage an alternative structure for the US money market than the one envisaged in the FRA.¹¹⁵

In rethinking financial reform, another alternative that policymakers in the 1920s might have considered is turning the call market to their purposes. Such a proposition would have seemed outrageous and intolerable to the architects of the 1913 legislation but the world had changed since then, not least because of the creation of the Federal Reserve System. The obvious objection to admitting call loans as eligible securities for discount and purchase by the Reserve banks is that these loans were inherently too speculative for the Federal Reserve System to take responsibility for them. However, admitting them to such a privilege could have been used to insist on their regulation, notably through the establishment of minimum margin requirements, and there was a precedent for doing just that in the United States, as Benjamin Strong knew only too well, since he had instituted margin requirements as head of the "Money Committee" during World War 1. Moreover, the Federal Reserve System, whether it admitted it or not, already bore

¹¹³ R. H. Hawtrey, *The Art of Central Banking*, London, 1933, 130-1.

¹¹⁴ US Congress, 1926-1927, 450.

¹¹⁵ Kenneth Garbade, « Why the U.S. Treasury Began Auctioning Treasury Bills in 1929, *FRBNY Economic Policy Review*, July 2008, 31-47. In fact, Garbade does not mention the role of Treasury bills as a potential instrument of monetary policy in his analysis of the introduction of Treasury bills in the United States.

responsibility for the call market since member banks could respond to tensions there by discounting their eligible securities, as the crisis of 1920-1921 had shown. Given that the Fed bore de facto responsibility for the call market, it would have made more sense to try to exercise some direct control over call loans than none at all. However, policymakers were to come around to this point of view only when the crash of October 1929 revealed again that the Federal Reserve System could not wash its hands of the call market's fate.

4. CONCLUSION

This paper sheds new light on the way the past is invoked in the present in the realm of economic policy. Focussing on the systemic financial reform envisaged by the Federal Reserve Act of 1913, it shows that the past was remembered and ignored in ways that were crucial in arguing for the necessity and possibility of radical financial reform in the United States. It reveals the strong commitment to the "lessons" of history among policymakers in the Federal Reserve Bank of New York as they designed and implemented policies for financial reform. And it shows that even as these policymakers faced mounting criticism of their policies from inside and outside the Federal Reserve System, they remained steadfast in their commitment to them. Thus, we see how powerful interpretations of the past can be in shaping economic policy through their tenacious grip on the ideas and actions of policymakers.

Notwithstanding FRBNY policymakers' commitment to reform, we have seen that they were increasingly forced to acknowledge that their policies were not achieving their intended results. Of particular importance in this regard, and a focus of attention in critics' attacks on FRBNY policies, was the anaemic demand for acceptances. Initially, policymakers saw US investors' lack of interest in holding acceptances as a temporary problem to be overcome through educational programmes. Eventually, however, they were forced to acknowledge that it was more intractable than that.

One explanation for the obstacles they encountered is that the architects of the FRA had misinterpreted the lessons of history and, in particular, had understated the embeddedness of financial activities in long-standing customs and practices that were resistant to change. I suggest instead that the difficulties of reform stemmed to an even greater extent from unexpected changes in the US money market following the enactment of the Federal Reserve Act. The real problem, therefore, was not how the lessons of the past had been learned but rather that they were no longer relevant to the present.

Thus, my analysis suggests that drawing on the past in shaping economic policy can contribute to the failure of policy reform if it leads policymakers to misunderstand the challenges they face in the present. In this case, policymakers would have benefitted from a much more critical approach to the original framing of reform embedded in the FRA. Now and then in the files of the FRBNY one finds hints of unease. For example, in a letter in 1918 that the president of the Guaranty Trust Company of New York shared with FRBNY officials, his vice-president says "we should face the facts, and try to meet the issues, taking into consideration our local conditions, and not conditions ruling before the war in countries where Government Banks were established and acceptance business was done for about two centuries".¹¹⁶ Such advice was not taken, however, allowing the framing of financial reform embodied in the FRA to persist unchanged, despite its increasingly evident failure.

Since that failure was not just a failure of financial reform but a failure of monetary reform as well, it may well have had adverse effects on the Fed's ability to respond to the worst economic crisis the United States had ever confronted. A new vision of monetary and financial reform emerged only in the throes of a crisis that originated in the New York call market, as so many

¹¹⁶ Acc_1, Albert Breton to Charles Sabin, February 14, 1918.

crises in the past had done. It is no surprise, therefore, that one of the key objectives of the wave of legislation that swept the United States in the early 1930s was to control the seemingly uncontrollable call market once and for all. And one of its other objectives was to turn the market for short-term government securities into a viable lever for monetary policy so that everyone could forget that the development of a large and liquid market for acceptances had been a central but unrealised objective of the Federal Reserve Act.

BIBLIOGRAPHY

- Abolafia, Mitch. "Narrative Construction as Sensemaking: How a Central Bank Thinks", *Organization Studies*, 31, no. 3 (2010): 349-367.
- Archives of the Board of Governors of the Federal Reserve System, National Archives and Records Administration (NARA), NARA II, College Park, MD.
- Archives of the Federal Reserve Bank of New York, Federal Reserve Bank of New York, New York.
- American Acceptance Council, Annual Report, First Annual Meeting, December 4, 1919 (New York, 1920).
- American Acceptance Council, Facts and figures relating to the American money market, New York, American Acceptance Council, c1931.
- Anderson, Benedict. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso, 1983.
- Bailey, Andrew and Cheryl Schonhardt-Bailey. "Does Deliberation Matter in FOMC Monetary Policymaking? The Volcker Revolution of 1979", *Political Analysis*, 16, no. 4 (2008): 404-427.
- Balabanis, Homer P. *The American Discount Market*, New York: Arno Press, 1980 (1935).
- Battilossi, Stefano. "Money Markets" in Youssef Cassis and Catherine Schenk, eds., *Oxford Handbook of Banking and Financial History*, Oxford, UK: Oxford University Press, 2016: 221-233.
- Beckhart, Benjamin Haggott. "Federal Reserve Policy and the Money Market, 1923-1931", in Beckhart, Benjamin Haggott, James Smith and William Adams Brown, Jr. *The New York Money Market*, volume 4, External and Internal Relations, New York: Columbia University Press, 1932.
- Board of Governors of the Federal Reserve System, *Banking and Monetary Statistics, 1914-1941*, Washington, D.C., 1976.
- Bordo, Michael and David Wheelock. "The Promise and Performance of the Federal Reserve as Lender of Last Resort" in Michael Bordo and William Roberds, eds. *The Origins, History, and Future of the Federal Reserve: A Return to Jekyll Island*, Cambridge & New York: Cambridge University Press, 2013: 59-98.
- Benjamin Strong Papers, Archives of the Federal Reserve Bank of New York, Federal Reserve Bank of New York, New York.
- Carlson, Mark, and Burcu Duygan-Bump. "The Tools and Transmission of Federal Reserve Monetary Policy in the 1920s," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, November 22, 2016, <https://doi.org/10.17016/2380-7172.1871>.
- Chandler, Lester, Benjamin Strong, *Central Banker*, Washington, D. C., The Brookings Institution, 1958.
- Crafts, Nicholas. "A Historical Perspective on the Great Recession", February 24th, 2011. <https://voxeu.org/article/great-recession-historical-perspective>.
- Eichengreen, Barry and Marc Flandreau "The Federal Reserve, the Bank of England, and the Rise of the Dollar as an International Currency, 1914-1939", *BIS Working Papers*, no. 328, 25 November 2010.
- Eichengreen, Barry. "Economic History and Economic Policy", *Journal of Economic History*, 72, no. 2, (2012).
- Eichengreen, Barry. *Hall of Mirrors: The Great Depression, the Great Recession, and the Uses – and Misuses – of History*, Oxford & New York: Oxford University Press, 2015.
- Ferderer, J. Peter. "Institutional Innovation and the Creation of Liquid Financial Markets: The Case of Bankers' Acceptances", *Journal of Economic History*, 63, 2003.
- Flandreau, Marc and Ugolini, Stefano. "Where it all began: lending of last resort at the Bank of England during the Overend-Gurney panic of 1866", in M. Bordo and W. Roberds (eds.), *The Origins, History, and Future of the Federal Reserve: A Return to Jekyll Island*, Cambridge: Cambridge University Press, 2013, 113– 61.
- Garbade, Kenneth D. *Birth of a Market : The U.S. Treasury Securities Market from the Great War to the Great Depression*, MIT Press, 2012.
- Garbade, Kenneth. "Why the U.S. Treasury Began Auctioning Treasury Bills in 1929", *FRBNY Economic Policy Review*, (2008), 31-47.
- Hall, George J. & Thomas J. Sargent, *Complications for the United States from International Credits, 1913-1940*, June 18, 2019,

<https://warwick.ac.uk/fac/soc/economics/research/centres/crta/events/crtaconferences/fiscalpolicy18/Sargent.pdf>

- Hansen, Per. "Hall of Mirrors: The Great Depression, the Great Recession, and the Uses—and Misuses—of History", *Business History Review*, 89, no. 3 (2015).
- Hawtrey, R. H. *The Art of Central Banking*, London: Longmans, Green and Company, 1932.
- Hobsbawm, Eric. "Introduction: Inventing Traditions" in Hobsbawm and Terence Ranger, eds. *The Invention of Tradition*. Cambridge, UK: Cambridge University Press, 1983, 1-14.
- James, John. *Money and Capital Markets in Postbellum America*. Princeton, NJ : Princeton University Press, 1978.
- J. Laurence Laughlin papers, Library of Congress, Washington D.C.
- Kellock, Harold. "Warburg, The Revolutionist", *The Century Magazine*, May 1915.
- Laughlin, J. Laurence, "Elastic Currency and the Money Market", *Journal of Political Economy*, 15, vol. 4, (1907).
- Laughlin, J. Laurence. "Currency Reform", *Journal of Political Economy*, 15: 10, Dec., 1907, 603-610.
- Laughlin, J. Laurence. "The Objects of the League", in J. Laurence Laughlin, "Banking Reform & the National Reserve Association", An Address delivered before the Ways and Means Committee, Chicago Association of Commerce, May 24, 1911, 19.
- Myers, Margaret. *The New York Money Market: Origins and Development*. New York : AMS Press, 1931.
- Nora, Pierre. ed., *Les lieux de mémoire*, Paris: Gallimard, 1984-1992.
- O'Sullivan. Mary. *Dividends of Development: Securities Markets in the History of US Capitalism, 1866-1922*. Oxford, UK: Oxford University Press, 2016.
- Paul Moritz Warburg papers, Sterling Memorial Library, Yale University.
- Report of the Monetary Commission to the Executive Committee of the Indianapolis Monetary Convention, Indianapolis, 1897, 28-9, 197-223, 346-351.
- Schonhardt-Bailey, Cheryl. *Deliberating American Monetary Policy: A Textual Analysis* Cambridge, MA: MIT Press, 2013.
- Seligman, E. A. "Introduction", *Proceedings of the Academy of Political Science*, 4, (1914).
- Tallman, Ellis and Jon Moen, "The Transmission of the Financial Crisis in 1907: An Empirical Investigation", *Federal Reserve Bank of Cleveland Working Paper*, 14-09 (2014).
- Smiley, Gene & Richard Keehn, "Federal Personal Income Tax Policy in the 1920s", *Journal of Economic History*, 55, no. 2 (1995).
- U.S. Comptroller of the Currency, *Annual Report*, vol. 1, Washington D.C., 1915.
- U.S. Congress, House, Report of the Committee Appointed Pursuant to House Resolutions 429 and 504 to Investigate the Concentration of Control of Money and Credit, 62nd Congress, 3rd Sess., Washington, DC, 1913a.
- U.S. Congress, Senate, Hearings Before the Committee on Banking and Currency on H.R. 7837 (S. 2639), 62nd Congress, 1st Sess., (Washington, DC), 3 vols., 1913b.
- U.S. Congress, Federal Reserve Act: Public Law 63-43, 63rd Congress, H.R. 7837: An Act to Provide for the Establishment of Federal Reserve Banks, to Furnish an Elastic Currency, to Afford Means of Rediscounting Commercial Paper, to Establish a More Effective Supervision of Banking in the United States, and for Other Purposes, 63rd Congress, Washington, DC, 1913c.
- U.S. Congress, House, Hearings before the Committee on Banking and Currency on H. R. 7895, 69th Congress, 1st Sess., (Washington, DC), 1926-1927.
- Warburg, Paul, "Defects and Needs of our Banking System", *New York Times*, 6 January 1907, AFR14-15.
- Warburg, Paul. *The Discount System in Europe*, Washington, D.C.: National Monetary Commission, 1910.
- Wicker, Elmus. *The Great Debate on Banking Reform: Nelson Aldrich and the Origins of the Fed*, Columbus, OH : Ohio State University Press, 2005.
- Willis, H. Parker, 'The Federal Reserve System: A Retrospect of Eight Years', *Political Science Quarterly* 37 (1922).
- Youngman, Anna. "The Growth of Financial Banking", *Journal of Political Economy*, 14, (1906): 435-43.