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IRVING FISHER AND THE 100 PERCENT RESERVE PROPOSAL*

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IRVING Fisher was the leading American economist of his generation—and perhaps of all generations through our own. In summer 1929, he added final touches to the manuscript of his magnum opus, *The Theory of Interest*. The next few weeks saw the stock market crash and the onset of the Great Depression. Fisher's consummate scholarship over more than a third of a century had not precluded substantial attention to and activity in matters of economic and political policy, along with accumulation of a fortune of millions. But after the fateful autumn of 1929, the fortune was soon gone. And Fisher's professional activity entered a period—lasting until his death, at age eighty, in 1947—that saw him in persistent, almost frenetic effort to refine explanations of "booms and depressions," to devise effective and acceptable policies of recovery and stabilization, and to persuade those holding political power—including the president—to adopt in time such measures of immediate correction and long-term reform. He labored not only with perseverance and intensity but with imagination, with a sense of pragmatism (even if with zeal that some deemed excessive), and with gallantry. He labored, also, with only diluted effect and modest appreciation.

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Permitted use is made of the Irving Fisher papers in Manuscripts and Archives, Yale University Library; the Henry C. Simons papers in the University of Chicago Law School Library; papers, mainly President's Personal File 431, in the Franklin D. Roosevelt Library (Hyde Park); the Willford I. King papers in Special Collections, University of Oregon Library; the Jacob Viner and E. W. Kemmerer collections of the Public Policy Papers in the Seeley G. Mudd Manuscripts Library of Princeton University; and the William Allen White papers in Manuscript Division, Library of Congress. The cooperation of the several librarians involved is genuinely and greatly appreciated.
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Fisher did not delay in joining battle with the forces of deflation and depression. Along with continuation of a massive schedule of public speaking, letters to editors, newspaper articles, and other efforts to reach a wide audience, he published six books in the period 1930–34: *The Stock Market Crash—and After* in February 1930, *Booms and Depressions* (1932), *Stamp Script* (1933), *Inflation?* (1933), *After Reflation, What?* (1933; a second edition in 1934), and *Stable Money* (1934). In addition, he published numerous articles during these years, including the significant (and several times translated and reprinted) "Debt-Deflation Theory of Great Depressions" in *Econometrica* (1933)—as well as articles and books on prohibition, health and eugenics, and calendar reform.[1] Finally, he engaged in heavy correspondence, much of it with political leaders, including Presidents Herbert Hoover and Franklin D. Roosevelt—in 1933 and 1934, Fisher wrote to Roosevelt at least thirty-five times (receiving four replies) and visited him twice.

In those early days of the Depression, Fisher persistently provided a basic orientation of monetarism in analysis and in policy prescription. "The chief direct cause of the depression"[2] was the one-third reduction of the money stock between 1929 and 1933, and "the only sure and rapid recovery is through monetary means."[3] He provided a stream of detailed proposals: devalue the dollar, most immediately in connection with raising prices generally; pursue aggressive open market operations in order to increase the money stock; provide governmental guarantee of bank deposits; use dated stamp scrip in order to maintain or increase monetary velocity; and, rather outside the realm of monetary policy, subsidize firms that increase their hiring of labor for minimum periods.[4]

In the midst of this intellectual and proselytizing activity, Fisher was introduced to the reform proposal to require 100 percent reserves against demand deposits in commercial banks. He was not an instant convert—not quite—but within a few months he had eagerly adopted the proposal and become its most enthusiastic and conspicuous proponent.

I

The 100 percent reserve arrangement has a history that far antedates the 1930s. The actual practice of seventeenth-century goldsmiths, statements of David Hume and David Ricardo, the position of the nineteenth-

[1] See Irving Norton Fisher, A Bibliography of the Writings of Irving Fisher (1961).

[2] Letter from Fisher to F. D. Roosevelt, December 21, 1936 (Yale).

[3] Letter from Fisher to L. M. Howe, secretary to the president, May 18, 1934 (Yale).

[4] William R. Allen, Irving Fisher, F.D.R., and the Great Depression, 9 Hist. Pol. Econ. 560 (1977). A few words of that article have been incorporated here.

century currency school, the Peel Bank Act of 1844, and more can be cited as evidence of early concern with full-reserve requirements, although the ancient emphasis was on reserves for currency instead of for demand accounts.

The essential effect of imposing 100 percent reserves would be to separate the *lending* function of financial institutions—along with money-holding, money-shifting, and currency-deposit convertibility processes—from *money-creation*, control of the size of the money stock then being solely a governmental function. Replacing fractional-reserve banking with reserves required to be equal to demand liabilities of banks would eliminate the ability of banks to create (and to destroy) money and to do so in multiples of changes in reserves. Demand deposits would be fully liquid and convertible into currency, with the aggregate size of the community's money supply determined by governmental policy.

The idea of 100 percent reserves was revived in the 1920s and early 1930s by Frederick Soddy, a Nobel Laureate in chemistry at Cambridge University.[5] Soddy complained robustly but with little elaboration about "secret private minting" by commercial banks: "Since banking became in reality minting by issuing cheque-books instead of notes, the banks have never been solvent."[6] "[T]heir legitimate business is to lend not create money." They would be forced to return to that business if "they are legally compelled henceforth to keep £ for £ of national money against their liabilities" to demand depositors.[7]

In March 1933, a group of economists at the University of Chicago, evidently with little if any influence from Soddy, gave very limited circulation to a six-page statement providing "both for emergency relief and for permanent banking reform," and one of the "detailed proposals" pertained to 100 percent reserves.[8] Those who signed the statement included G. V. Cox, Aaron Director, Paul Douglas, A. G. Hart, F. H. Knight, L. W. Mints, Henry Schultz, and Henry C. Simons.[9] The drafting

[5] See Herman E. Daly, The Economic Thought of Frederick Soddy, 12 History of Political Economy 469 (1980).

[6] Frederick Soddy, The Role of Money 67–68 (1934).

[7] Frederick Soddy, Money versus Man 95–96 (1931).

[8] The memorandum, directed almost entirely to banking and supervisory institutional and procedural concerns, with little attention to policy objectives and criteria, was located in the Roosevelt Library and made available to me by Ronnie J. Phillips.

[9] Letter from Cox, Director, Douglas, Hart, Knight, Mints, Schultz, and Simons to L. D. Edie, March 15, 1933 (Chicago). The authors caution that "this document is strictly for your private use; and we request that every precaution be taken against mention of it in the press. The program defined in the statement is one which we believe to be sound, even ideal, in principle. What its merits may be, in the light of political consideration, we

was done by Simons, who "got started toward this scheme" some ten years earlier, in "trying to figure out the possibilities of applying the principle of the English Act of 1844 to the deposits as well as to the notes of private banks." "This Act would have been an almost perfect solution of the banking problem," Simons added, "if bank issue could have been confined to notes."[10] Later, Fisher was to allude many times to the English precedent, partly to emphasize that "the 100 per cent proposal is the opposite of radical."[11]

Fisher was one of the few to receive the memorandum from Simons and his colleagues. As summarized in a separate letter from Simons, "the purely banking features of our scheme" could be explained largely in terms of the objective of "abolition of private credit as an element in the circulating media—concentration of complete and direct control over the quantity of media in the hands of the central monetary authority."[12] Fisher responded immediately and at length, expressing delight that "the economists of the University of Chicago are taking a definite and concerted initiative in regard to plans for getting us out of the depression." Even if some of the proposals were "impractical . . . at this time, I think it ought to be practical to at least divorce the demand deposit business from investment business."[13]

Fisher did not at that time embrace the 100 percent reserve proposal. Even five months later, in August 1933, he did not allude to it in a long conversation with the president or in material then submitted to the president. It was Henry Wallace, secretary of agriculture, who apparently first called the president's attention to the idea, writing to him a few days after distribution of the paper that, "the memorandum from the Chicago economists which I gave you at the Cabinet meeting . . . is really awfully good and I hope that you or Secretary [of the Treasury William] Woodin will have the time and energy to study it."[14] The earliest available evi-

frankly do not know. We are sensible, moreover, of an obligation not to broadcast publicly any statement which might undermine confidence in Administration measures, or impair their chances of successful operation. On the other hand, we feel, that the statement may merit deliberate consideration, among people of interests like our own; also, that it may suggest measures which might usefully be incorporated in other, and perhaps less impractical, schemes. Moreover, most of us suspect that measures at least as drastic and 'dangerous' as those we describe can hardly be avoided, except temporarily, in any event."

[10] Letter from Simons to Fisher, March 24, 1933 (Chicago).

[11] Fisher, address to Controllers Institute of America, September 18, 1934 (Yale).

[12] Letter from Simons to Fisher, March 24, 1933 (Chicago).

[13] Letter from Fisher to Cox, Director, Douglas, Hart, Knight, Mints, Schultz, and Simons, March 19, 1933 (Yale).

[14] Letter from Henry A. Wallace to Roosevelt, March 23, 1933 (Roosevelt).

dence of Fisher communicating with Roosevelt on the plan is dated January 1934.

Meanwhile, as "the result of months of group discussions"—the group now including C. O. Hardy, of the Brookings Institution—Simons prepared in November 1933 another, longer, and more widely distributed memorandum.[15] The opening paragraph is vigorous:

> Our government has, in a significant sense, allowed the commercial banks to usurp its primary function of controlling the currency. Bank credit has become the predominant element in our circulating medium. Until the Civil War we tried "free banking" with respect to note issue; at present we are still trying "free banking" with respect to deposit currency. The latter system, like the former, gives us an unreliable and unhomogeneous medium; and it gives us a regulation or manipulation of currency which is totally perverse. Money is created when it should be destroyed, and destroyed when it should be created. Our much heralded achievements in control (witness the Federal Reserve System), being designed to yield greater "elasticity" of credit, have served only to aggravate the underlying difficulty.

No "effective solution" was to be found in specifying kinds of loans or of collateral in which banks might deal, nor was widespread branch banking acceptable. Rather, what was required was "*the outright abolition of deposit banking on the fractional-reserve principle*." This was "an indispensable first step toward establishment of the monetary conditions under which a free-enterprise economy can function effectively." Again, Fisher provided a detailed reply, and Simons could find no "substantial objection to anything" in his "excellent" letter.[16]

By the end of 1933, Fisher had actively entered the lists in support of 100 percent reserves. He helped to spread awareness of the Chicago memoranda, and he repeatedly acknowledged his indebtedness to Simons and to others for his introduction to the general plan. Further, Fisher was not alone in pressing consideration of the proposal. Simons himself incorporated a section on such banking reform in his well-known 1934 pamphlet, *A Positive Program for Laissez-Faire;* Laughlin Currie gave brief attention to the proposal in his 1934 volume, *The Supply and Control of Money in the United States;* and major articles on the subject were published by, among others, A. G. Hart in 1935, James W. Angell in 1935, and Frank D. Graham in 1936. But, beginning in 1934 and through

[15] Banking and Currency Reform (mimeographed, November 1933), 15 pp., with appendix (Banking and Business Cycles, 6 pp.) and supplementary memorandum (Long-Time Objectives of Monetary Management, 7 pp.) (Chicago); letter from Simons to Douglas, October 2, 1934 (Chicago).

[16] Letter from Simons to Fisher, January 19, 1934 (Yale).

the rest of his life, Fisher produced a flood of output—a book in three editions, articles and notes, speeches, letters, and petitions—and became the central figure in the debate.

As early as January 1934, we find Fisher not simply talking with members of Congress about the 100 percent reserve proposal but actually preparing a bill of implementation and accompanying notes for a supporting speech for Representative T. Alan Goldsborough. Work of redrafting proposals, corresponding, and lobbying continued. By early summer 1934, Fisher was circulating portions of a book manuscript.[17] He indicated that it was being written "with the cooperation of Professor Simons . . . , some of his colleagues, and other people. We believe that this '100% plan' affords by far the best solution of the problem which it attacks."[18] In actuality, Simons had substantial misgivings about the reserve proposal, about Fisher's manuscript, and, indeed, even about some characteristics of Fisher.

The chief detailed concern of Simons with the reform plan pertained to what Fisher himself called "bootleg money."[19] Not long after the November 1933 memorandum, Simons wrote to Paul Douglas that he had been "a little upset lately about the banking scheme—trying to figure out how to keep deposit banking from growing up extensively outside the special banks with the 100% reserves. Just what should be done, for example, to prevent savings banks (a) from acquiring funds which the depositors would regard as liquid cash reserves or (b) from providing through drafts a fair substitute for checking facilities?"[20] Simons repeated the point to Fisher in mid-1934: "[S]avings-deposits, treasury certificates, and even commercial paper are almost as close to demand deposits as are demand deposits to legal-tender currency. The whole problem which we now associate with commercial banking might easily reappear in other forms of financial arrangements," with alternating inflation and deflation.[21]

[17] Fisher felt that the "entirely new plan for money and banking . . . will do more than everything else that has been attempted to cure and prevent depressions." Letter from Fisher to Andrew Shearer, May 23, 1934 (Yale).

[18] Letter from Fisher to Willford I. King, July 16, 1934 (Yale); see also letter from Fisher to James Harvey Rogers, July 16, 1934 (Yale).

[19] Notes for Speech, written by Fisher for Congressman T. A. Goldsborough, January 21, 1934 (Yale).

[20] Letter from Simons to Douglas, January 25, 1934 (Chicago).

[21] Letter from Simons to Fisher, July 4, 1934 (Chicago). "Little would be gained by putting demand deposit banking on a 100% basis," Simons went on, "if that change were accompanied by increasing disposition to hold, and increasing facilities for holding, liquid 'cash' reserves in the form of time-deposits. The fact that such deposits cannot serve as

More generally, Simons looked upon banking reform as constituting only a small, even if strategic, portion of his own "positive program for laissez-faire." In letters to Fisher and to Frank W. Taussig, he warned against excessive emphasis on particular, first-proposed steps of reform (including those of the Chicago memoranda),[22] against distinguishing "too sharply between monetary policy and fiscal policy,"[23] and against the dangers of oversimplification and popularization.[24] Simons complained to Taussig that he was "rather unhappy about the Fisher manuscript. . . . His enthusiasm and his efforts at popularization have led him, I feel, into many infelicities of statement and into grossly extravagant claims as to what the scheme would do."[25] Taussig agreed in general: Fisher "is a brilliant fellow, and a very lovable one. He has the temperament of a knight errant, and pitches in without knowing just how far his quick moves will lead him. I like him immensely, and wish I did not so often have to differ with him."[26]

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circulating medium is not decisively important; for they are an effective substitute medium for purposes of cash balances. The expansion of time deposits, releasing circulating medium from 'hoards,' might be just as inflationary as expansion of demand deposits—and their contraction just as deflationary. . . ." While continuing to support "the 100 per cent reserve scheme" as part of a "gradualist program" of monetary/fiscal reform, Simons lamented government "confusing everybody . . . by issuing moneys, practically moneys, and near-moneys. . . ." See essays of 1944 and 1946 reprinted in his Economic Policy for a Free Society (1948), esp. pp. 221, 229, 331.

Fisher was little fazed by such concern over dilution of control by evolving substitutes for currency and demand deposits. "As I see it," he replied, "savings deposits turn over very slowly and are dislodged in any large volume only by some big force. . . . It seems to me quite preposterous to consider savings deposits as on all fours, or very similar to, deposits subject to check. . . . The statistical fact is that anything held for interest does not circulate as fast as what bears no interest. . . . I have not seen anything in any of your statements so far which would seem to me to justify your fears in regard to savings accounts." Letter from Fisher to Simons, December 14, 1934 (Yale).

[22] Letter from Simons to Fisher, November 9, 1934 (Chicago); letter from Simons to F. W. Taussig, November 12, 1934 (Chicago). Compare Simons, Economic Policy, reprinting essays of 1936 (at 331) and 1942 (at 191).

[23] Letter from Simons to Fisher, July 4, 1934 (Chicago).

[24] *Id*. The wariness of Simons did not diminish over time. In 1937, he declined to join Fisher in "any drive for definitive legislation for carrying out the 100% scheme. . . . I have little faith in any simple legislative prescription. To me, the scheme (whatever its potentialities during the banking crisis) is significant only for its definition of an ideal objective of gradual reform; and in such a gradual unfolding, changes outside formal banking seem even more important and indispensable than the things which we stressed in the beginning." Letter from Simons to Fisher, February 3, 1937 (Chicago).

[25] Letter from Simons to Taussig, November 12, 1934 (Chicago).

[26] Letter from Taussig to Simons, November 15, 1934 (Chicago). Fisher could hardly be ignored by eminent contemporaries, and assessments were strongly stated. Jacob Viner dismissed a proffered proposal by Fisher as "terrible," and had a "generally low estimate of Fisher's judgment" in policy matters. Letter from Viner to Secretary of the Treasury

In mid-1934, the knight errant seemed not only enthusiastic but optimistic. The idea of 100 percent reserves was circulating, being more and more widely discussed and attracting support. Bills of implementation were being introduced. "Several . . . members of both houses of Congress are advocating the basic principle. It seems, therefore, certain to become a leading topic in the next session of Congress and, if the idea finds enough support among leaders of thought, it is more than possible that it will be adopted."[27] Even the cautious and skeptical Simons felt later in the year that the submitted congressional bills "are much less bad than I had expected them to be—and not ill-suited to their immediate purpose of initiating discussion."[28] At least four times in late 1934, Fisher urged the president—through letters, memoranda, and the first chapter of his book manuscript—to consider the proposal and to talk about it with Fisher. He assured Roosevelt that "most economists and bankers who know of it approve."[29] But he wrote his son in early 1935 that, while "Congress is ready" to accept the 100 per cent reserve idea, "the President is afraid of the bankers."[30]

Henry J. Morgenthau, May 23, 1934 (Princeton). "While there is much to be said for the one-hundred-percent-reserve idea, Fisher is not the person to say these things. His book is superficial and biased and reflects the fact that he has degenerated into a crank propagandist, with the best of motives, but with little regard for accuracy or objectivity. I have in the course of my [governmental] duties had to deal with him rather brutally in order to prevent him from doing even more harm." Letter from Viner to Taussig, October 20, 1934 (Princeton). In a conciliatory tone, Viner wrote to Fisher: "I hope you understand that when I find it necessary to criticize anything you say, it is always with regret. I have the highest regard for your past contributions to economics and for yourself personally." Letter, January 13, 1936 (Princeton).

Late in the lives of both men, Joseph A. Schumpeter, depressed but gracious, wrote to Fisher in declining "a call of hope" in promotion of monetary reform: "I am not, like you, hale, strong, and in fundamental—and hopeful—sympathy with modern mankind. On the contrary I feel ill in mind and body . . . , always tired and downcast and am dragging myself through work which nevertheless is *all I do not hate*." But his regard for Fisher was profound: "I consider you one of the dozen or so first economists of all times and countries. . . . Moreover I entertain feelings of admiration and affection toward you personally which I reserve for a still smaller number of people." Letter, February 18, 1946 (Yale). After Fisher's death, Schumpeter wrote to Fisher's son, referring to his " . . . vivid personal impression of that great and lovable man." Letter from Schumpeter to I. N. Fisher, June 14, 1947 (Yale).

[27] Letter from Fisher to King, July 16, 1934 (Yale).

[28] Letter from Simons to Douglas, October 2, 1934 (Chicago).

[29] Letter from Fisher to Roosevelt, December 12, 1934 (Yale). Roosevelt passed on to Secretary of the Treasury Morgenthau a statement from Fisher (September 15, 1934 [Roosevelt]) proposing 100 percent reserves: "This is the memorandum made out by Professor Fisher, and I honestly think it is worth your looking over." Ronnie J. Phillips (The Chicago Plan and New Deal Banking Reform 110–13 (1992)) recounts that in the same month Morgenthau aide Lauchlin Currie provided the secretary a substantial memorandum on monetary reform, including advocacy of 100 percent reserves.

[30] Letter from Fisher to I. N. Fisher and his son's wife, February 24, 1935 (Yale).

II

The book, *100% Money,* was published in April 1935. For Fisher, this was no academic exercise, nor was it designed merely to stimulate scholarly discussion of possible reforms. The substance of the book reflected fundamental concerns and provided the best hope of salvation. The "main point" of the plan, he emphasized in correspondence, was that it "would prevent a boom, but by the same token . . . , it would prevent a depression."[31] "[T]o my mind, it, more than any other proposal, will help conserve our capitalist system and prevent banking from becoming nationalized."[32]

Fisher immediately sent a copy of the book to the president. A covering letter stressed both the economic urgency and the political shrewdness of adoption of the reserve proposal:[33]

> Frankly, I am terribly disappointed at the slowness of your monetary policies. Your silver policy is helping because it is creating new money but the 100% money plan could get us out of the depression *far faster* and keep us out with far greater certainty than any other plan, to say nothing of getting the government largely out of debt to boot.
>
> Incidentally, it would solve your major political problems and bring Father Coughlin into camp again. To my mind, it would be the master stroke of your administration. . . .
>
> I wish to stress with all the earnestness I can the importance of your giving this matter your personal and careful attention. I know nothing which seems to me half as important for you at this time.

Fisher regarded the publication as a "preliminary edition,"[34] and in January 1936 there appeared a second edition. Along with the two editions of his book, half a dozen expositional and polemical articles were written by him, the first appearing as early as September 1934 and the others in 1936, 1937, and 1938. According to Fisher,[35] "the best version of the 100% plan" was embodied in a 1937 article.[36]

By Fisher's argument, "the essence of the depression" was the fall in "check-book" money from $22 billion in 1929 to $14 billion in 1933—and "the essence of the recovery" between 1933 and 1937 was expansion of money to $23 billion. "Such a see-saw was inevitable under our fractional

[31] Letter from Fisher to King, March 17, 1935 (Oregon).

[32] Letter from Fisher to William Allen White, April 9, 1935 (Library of Congress).

[33] Letter from Fisher to Roosevelt, April 23, 1935 (Yale).

[34] Letter from Fisher to King, April 10, 1935 (Oregon).

[35] Letter from Fisher to Lauchlin Currie, Federal Reserve, December 19, 1937 (Yale).

[36] 100% Reserves, An Old System Adapted to Modern Needs, Commercial and Financial Digest (June 1937).

reserve system," with commercial banks destroying and creating money through lending and investing activity. "Under the 100% reserve system, on the other hand, no action of the banks could alter the circulating medium in the least." The system could be introduced—or, as Fisher put it, reintroduced—with little disturbance by allowing initially held government bonds to be counted as reserves, with the government ready to purchase with "cash" such bonds from the banks at par. In addition to treating such bonds as reserves, banks could borrow "new paper money" from the government in order to increase reserves to 100 percent. With demand deposits thereafter subject to full reserves, they would be guaranteed, or insured, without limit. And there would be no panic runs on banks.[37] The money stock would be altered over time, not by commercial bank activity, but by "the monetary authority (presumably the Federal Reserve Board) . . . by means of the now familiar open-market operations." Typically, the government would be progressively acquiring its bonds," and "a yearly addition to the nation's money of 5% would extinguish our existing debt in a little over fifteen years." Whether money should be increased or decreased would be determined by "the slightest signal of deflation" or inflation, "as registered by an index number." The scheme would effect a "complete divorce . . . between money as a governmental function and loaning as a banking function." It is not the "proper business" of banks to create or destroy money. "Their main business would then become investing their time deposits and savings deposits, while their demand deposits would merely consist of government-made money entrusted to their care by its owners."

In correspondence, as well as in publications, Fisher left no room for doubt that the central purpose and inevitable consequence of the scheme

[37] Government guarantee of demand deposits (up to a specified limit) was introduced by the Banking Act of 1933. Fisher assured the president that, "*with reflation,* the risk in such guarantee would be negligible." (Handwritten postscript in letter from Fisher to Roosevelt, May 13, 1933 [Roosevelt].) But while he had advocated such deposit insurance for well "over a year," he considered it to be an "emergency measure" and a "temporary expedient." (Letter from Fisher to Cox, Director, Douglas, Hart, Knight, Mints, Schultz, and Simons, March 19, 1933 [Yale].)

"As a temporary expedient, deposit insurance was a helpful measure designed to get us out of the depression. But, in the case of State banks, experience shows that insuring deposits has usually increased the risk insured against, by encouraging careless banking. That is, insurance against risk is apt to be relied on so much that the previous direct efforts to avoid risk are apt to be relaxed. . . . No better deposit insurance could be had than 100% reserves." (Fisher, 100% Money [1936], at 161–62.)

"The 100% plan would automatically *insure all* checking deposits so that any other sort of insurance would be rendered superfluous." (Letter from Fisher to Roosevelt, December 21, 1936) [Yale].)

was to enable monetary authorities "absolutely to control the volume of money;"[38] further, it was "the *only* practicable plan proposed for transferring completely all control over our chief circulating medium from the banks to the Government;"[39] and the plan entailed a reserve requirement of a full 100 percent, not 99 or other smaller percentage.[40]

III

At the end of 1936, Fisher wrote to the president that "this plan has now run the gauntlet two years and has won its way very fast."[41] And

[38] Letter from Fisher to Roosevelt, October 24, 1937 (Yale). Fisher had rather a fluctuating and ambivalent view of the Federal Reserve. He had much respect for Governor Benjamin Strong of the New York Federal Reserve Bank in the 1920s; he was exasperated by what he deemed the timidity of open-market operations in the early 1930s; he was enthusiastic about the expansion and clarification of Federal Reserve powers provided in the Banking Act of 1935, and on several occasions suggested possible appointments to the board; and he persisted in being hopeful, in the face of disappointments, that Marriner Eccles, Federal Reserve chairman in the mid- and late 1930s, would be a bold and sophisticated force in policymaking—while Eccles was much less charitable toward Fisher.

Fisher was concerned about "younger economists . . . being somewhat swept along in the movement toward managed economy." He greatly doubted the wisdom of "following . . . [Russia] any further than the New Deal has done." "[M]ost of the ills which these people expect to cure or prevent by managed *economy* will be cured or prevented by managed *currency*. I make a distinction between money which should be a government monopoly and most other economic institutions." (Letter from Fisher to Richard A. Lester, November 23, 1936 [Yale], emphases added.) "[C]ontrol of money" is "the easiest of all controls and most incontestably proper for the government. . . . " (Letter from Fisher to Homer Cummings, attorney general, December 10, 1937 [Yale].) "[T]he dollar ought to be stabilized as to its domestic purchasing and debt paying power. . . ." Such management is best accomplished, not with "the dollar . . . tied to any metallic base . . . " (letter from Fisher to Fred S. Caldwell, January 19, 1937 [Yale]), but with "a reserve system such that for each additional dollar of deposits subject to check there must be an additional dollar for cash or credit reserves" (letter from Fisher to E. W. Kemmerer, February 14, 1938 [Princeton].) Indeed, shortly after passage of the act of 1935, Fisher happily held that "the reconstituted Federal Reserve Board has now almost all the powers necessary for properly managing the dollar," although "the Board ought to be given a definite criterion for exercising these powers, just as the Swedish Riksbank has been given a definite criterion (an index number of the cost of living) to which it must conform." (Fisher, Is the Money Question in the Campaign? in a weekly newspaper series, March 30, 1936 [Roosevelt].) With well-established open-market operations, presidential appointment of all board members, and an understanding chairman of the board, "this means a definitely managed currency." (Letter from Fisher to Senator Elmer Thomas, September 5, 1935 [Yale].) But in the 1937–38 recession, Fisher complained to the chairman that "money management . . . could do far more than it has and could control the volume of circulating medium within one percent of what" amount is indicated by an appropriate criterion. (Letter from Fisher to Marriner S. Eccles, January 20, 1938 [Yale].)

[39] Letter from Fisher to Roosevelt, November 10, 1936 (Yale).

[40] Letter from Fisher to Roosevelt, December 21, 1936 (Roosevelt).

[41] *Id.*

he enthused in early 1937 to another correspondent that "people in high places are for it, and it would not greatly surprise me to see it actually adopted before four years are up—or even in '37."[42] But there was little encouragement from Roosevelt, who wrote to Fisher in spring 1937: "Such a proposal possesses many elements of attractiveness. As you doubtless recognize, however, it involves a number of complex considerations, in its practical applications as well as in its larger aspects."[43] The president said that he had referred the recommendation to the Treasury and to the Federal Reserve—but his own letter had been drafted by an assistant secretary of the Treasury.

Fisher shifted tactics from largely individual effort to group and collective action. In the fall of 1938, joined by Paul Douglas, Frank Graham, Earl Hamilton, Willford King, and Charles Whittlesey, he drafted a five-page statement, "A Program for Monetary Reform." During the winter it was widely circulated, and in March 1939 it was sent to the president, reportedly with the support of nearly two hundred economists.[44] The "Program" called for "certain definite criteria for money management," sufficiently well defined "as to leave only a minimum of discretion to the Monetary Authority"; and the power of commercial banks to change the size of the money stock by lending and investing was to be eliminated by requiring 100 percent reserves.[45] The president only acknowledged receipt of the material.[46] Two years later, the group, now joined by John Commons and "in behalf of some 400 economists (85% of those expressing an opinion)," submitted to the president almost identically the same "Program."[47] The president responded that the statement "will receive careful study."[48]

The war interrupted group work on banking reform. But by early spring 1945, Fisher pronounced in a form letter that he was "resuming the ef-

[42] Letter from Fisher to Amos Pinchot, January 4, 1937 (Yale). "It is surprising how fast the idea has spread. A few days ago a Congressman came . . . to say that he was in Congress primarily to put this idea into practice. He believes that it is possible in the next session. . . ." Letter from Fisher to Emanuel Rubenstein, June 17, 1936 (Yale).

[43] Letter from Roosevelt to Fisher, March 23, 1937 (Roosevelt).

[44] In distributing the draft, a covering letter suggests, "We feel that every economist has a certain responsibility to see to it that this vitally important matter is not neglected indefinitely." Letter from Douglas, Fisher, Graham, Hamilton, King, and Whittlesey to "Dear Colleague," January 10, 1939 (Oregon).

[45] The "Program" is dated February 1939; a copy was sent to Roosevelt, with a covering letter from Fisher and another letter from all six economists, March 15, 1939 (Yale).

[46] Letter from Roosevelt (prepared by the Treasury) to Fisher, April 21, 1939 (Roosevelt).

[47] The "Program," along with a brief "Memorial to Congress" and a covering letter from Fisher, was sent to Roosevelt January 27, 1941 (Roosevelt).

[48] Letter from Roosevelt to Fisher, February 13, 1941 (Roosevelt).

fort."[49] Other correspondence, both individual and group broadsides, followed in a steady cascade—along with inauguration and chairing of a new organization, the "Anti-Inflation-and-Deflation Committee."[50] His prodigious efforts continued almost to the moment of his death on April 29, 1947—while in a terminal stay in a hospital, he wrote a long letter to President Harry S Truman on March 27 urging "a law which will sever the tie that now binds bank loans to the volume of checkbook money,"[51] and within a week or so of his end he corrected his final manuscript, which called for 100 percent reserves along with "a legal requirement that money should be injected only on signs of threatened deflation and withdrawn only on signs of threatened inflation."[52]

IV

The 100 percent reserve idea did not die immediately with Fisher. It has since received some serious attention and support, most notably from Milton Friedman.[53] But the Fisher campaign and its proximate impact

[49] Letter from Fisher to "Dear Colleague," April 1945 (Oregon). With reference to the recently negotiated Bretton Woods agreement, Fisher believed that "the mere stability of exchanges is a very superficial form of stabilization and might mean world wide waves of inflation and deflation, if nothing else was done. . . . [T]he most promising mainstay of the real purchasing power of a monetary unit is, for the United States at least, to be found through" the 100 percent reserve "device." Letter to Seymour E. Harris, January 27, 1945 (Yale). During the Bretton Woods negotiations in July 1944, Fisher wrote to J. M. Keynes, head of the British delegation, to urge informal promotion at the conference of "my own pet plan—100% reserves behind checking accounts." "I think it quite possible it could, after the war, be put over for Americans and other countries, as the best *national* plan to interlock with the *international* plan you are now trying to put over. We could then avoid great inflation and deflation in future over a wide area." (Letter from Fisher to Keynes, July 4, 1944 [Yale].) But Keynes, while graciously acknowledging that Fisher was "one of my earliest teachers on these matters," had "some considerable reservations" about "100 per cent money," and declined being "an advocate." "In my judgment deflation is in the near future a much more dangerous risk than inflation. I am afraid of your formula because I think it would, certainly in England, have a highly deflationary suggestion to a great many people. Apart from that, I am satisfied that in British conditions anyhow . . . we can obtain complete control over the quantity of money by means much less capable of exciting unfavourable comment and opposition." (Letter from Keynes to Fisher, July 7, 1944 [Yale].)

[50] In early 1947, the committee consisted of nineteen people, mainly academics, including Benjamin Graham, Frank Graham, Harold Groves, Harold Hotelling, Willford King, Theodore Kreps, and Charles Whittlesey. Memorandum, January 21, 1947 (Yale).

[51] Letter from Fisher to Truman, March 27, 1947 (Yale).

[52] Manuscript, Our Inflation and Deflation—How Come? How Stop? Initial draft February 26, 1947, 39 pp. (Yale).

[53] Friedman's fullest discussion is in his A Program for Monetary Stability 65–76, 108–9 (1960). His major addition to the proposal of Fisher and Simons—a suggestion, he acknowledges, received from work of Lloyd Mints and George S. Tolley—is government payment of interest on the reserves held by commercial banks. Some revival of reform and policy

have long been only a historical episode. Why did it fall short? We briefly suggest the following partial review.

First, there were those who, while sympathetic to the scheme, found their attention diverted and their efforts diluted by additional aspects of overall recovery and reform. They put less weight, both relatively and absolutely, than did Fisher on the reserve proposal, and they were sometimes irritated by what they deemed to be exaggerated claims on behalf of the proposal.

Second, they found the notion of "money" to be more subtle and its quantitative control to be more complex than Fisher's representations allowed. If one kind of the public's liquid assets is subjected to full reserves, then other assets, not so closely regulated, may assume some of the monetary functions, with little being accomplished other than increasing transactions costs.

Third, Fisher's attention was directed much more toward restructuring banking institutions than toward elucidating the monetary policy to be pursued after inauguration of the institutional revision. Even if we establish that money is important, and even if we adequately identify money and maintain the uniqueness of its moneyness, by what rule shall the optimal quantity of money and its rate of change be determined? Are the techniques of implementation of the rule adequate? And will unforeseen and largely uncontrolled changes in monetary velocity subvert efforts of stabilization that might otherwise be effective?

Finally, acknowledging that the Fisher plan called for a fundamental revision of financial arrangements, were the probable gains sufficient to warrant the attendant concerns and costs? And might all or at least the bulk of the gains be attained with alternative tactics that would be less unsettling?

Fisher did not wholly ignore any of these questions. But his arguments were not sufficiently persuasive in the arena of "practical" proposals, where even imagination and zeal do not invariably win the field of debate and policy determination quickly and easily. At the time, what most caught the fancy of politicians and professors was not seemingly arcane monetary analyses and banking proposals but the income analyses and fiscal proposals associated mainly with J. M. Keynes. Still, seeds of intuition and insight planted long ago sometimes—after patient nurturing by other able cultivators—can bear useful fruit.

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concern involving 100 percent reserves has been stimulated by the financial fiasco of the past dozen years, with full reserves a possibly attractive substitute for guarantee of deposits. See Robert E. Litan, What Should Banks Do? (1987). Extensive historical work on banking reform in the 1930s and later is being conducted by Ronnie J. Phillips.

BIBLIOGRAPHY

Allen, William R. "Irving Fisher, F.D.R., and the Great Depression." *History of Political Economy* 9 (1977): 560–87.

Daly, Herman E. "The Economic Thought of Frederick Soddy." *History of Political Economy* 12 (1980): 469–88.

Fisher, Irving. *100% Money*. Rev. ed. New York: Adelphi Company, 1936.

Fisher, Irving Norton. *A Bibliography of the Writings of Irving Fisher*. New Haven, Conn.: Yale University Press, 1961.

Friedman, Milton. *A Program for Monetary Stability*. New York: Fordham University Press, 1960.

Litan, Robert E. *What Should Banks Do?* Washington, D.C.: Brookings Institution, 1987.

Phillips, Ronnie J. *The Chicago Plan and New Deal Banking Reform*. Unpublished manuscript. Annandale-on-Hudson, N.Y.: Bard College, Jerome Levy Economics Institute, December 8, 1992.

Simons, Henry C. *Economic Policy for a Free Society*. Chicago: University of Chicago Press, 1948.

Soddy, Frederick. *Money versus Man*. London: Elkin Mathews & Marrot, 1931.

Soddy, Frederick. *The Role of Money*. London: George Routledge & Sons, 1934.