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David Laidler

Meltzer's History of the Federal Reserve

A Review of *A History of the Federal Reserve Volume 1: 1913-1951* by Allan H. Meltzer, with a Foreword by Alan Greenspan. Chicago, University of Chicago Press, 2003. pp. 800 + xiii, $75.00

by

David Laidler[1]

[1]The author is Bank of Montreal Professor, in the Department of Economics at the University of Western Ontario. He gratefully acknowledges the Bank's support of his work. John McMillan, Roger Sandilands and Richard Timberlake made helpful comments on an earlier draft.

I

Allan Meltzer refers to his *History of the Federal Reserve* as a biography of an institution, and so it is, in the same way that Milton Friedman and Anna Schwartz's *Monetary History of the United States* is the biography of a particular time series: both books deal with the "life and times" of their principal subject, with a strong emphasis on the "times". This is the first of a projected two volume set, and covers the same period (roughly speaking) as chapters 5 - 11 of Friedman and Schwartz's study. Because, however, Meltzer emphasises the economic ideas, institutional factors, and personalities that drove monetary policy over his period, while they stressed the effects of that policy on the behaviour of the money supply, and by that route on the economy, the two works are more complements than substitutes.

From the 1960s onwards, Meltzer was an important pioneer in his own right of what came to be known as "Monetarism", so it is no surprise that his interpretation of monetary history pays considerable attention to various monetary aggregates, (more often the base and M1 than Friedman and Schwartz's preferred M2, however). Even so, where Friedman and Schwartz allowed conclusions about the importance of money to emerge from their story, Meltzer is more inclined to impose them, as an aid to organising his discussion. His principal question is always why the Fed acted as it did in any particular episode, and his answer invariably refers to the theoretical framework through which its decision-makers viewed the economy. The fact that he systematically casts his story in terms of a well-developed framework of his own, which does not vary as the history he is dealing with unfolds, enables him to tell an exceptionally clear story about why, as the ideas that actually informed policy evolved, things sometimes went well and sometimes badly. Even the reader who is skeptical about Meltzer's own monetarist interpretation of events should, therefore, appreciate the role it plays in signposting what often becomes a complex narrative.

Meltzer's monetarism, developed in the course of his long collaboration with Karl Brunner, has its own distinctive characteristics. As Brunner and Meltzer's (1993) retrospective account of their joint contributions showed, they paid particular attention to the interactions among the central bank, the banking system and the non-bank public in causing variations in that crucial variable, the quantity of money. They shared Friedman's view that, no matter how it got into circulation, the effects of money would often be very much the same, but they treated this as a conclusion to be established analytically, and in a way that would reveal when exceptions might arise, rather than as an hypothesis to be maintained pending its empirical refutation. Brunner and Meltzer also took a special interest in the effects of institutional constraints on the conduct of monetary policy, and in the influence on that conduct of beliefs about the way the economy works.[2]

This book is, then, the product of a distinctive brand of monetarism, and represents an important extension of a research agenda that has been active for over three decades. It emphasises two overarching issues that are of great interest to modern monetary economists: central bank independence, and the role of economic theory in conditioning agents' behaviour. It also yields lessons that many will find unfamiliar. First, the Fed's history makes it clear that problems arising from the interaction of politics with monetary policy are not of a sort that can be *solved once and for all*, for example by implementing the appropriate contract between the government and the central bank; rather, the challenge was (as it still is) to design institutions that are resilient enough to *cope on an ongoing basis* with the tensions these problems create. Secondly, and without denigrating the importance of the beliefs of the public at large, it is policy makers who hold the centre of the stage in Meltzer's history, and he shows that their behaviour was often conditioned not by true economic theories, but by false theories that they *believed* to be true, that these theories often differed among policy makers at a particular moment, and that they changed over time too.

In this essay, I shall discuss some highlights of Meltzer's treatment of these two themes, and in the final substantive section, I shall take up what seems to me to be an important element

[2]That interest may be seen as a particular example of their long-standing curiosity, reflected in a number of papers that they commissioned over the years for Carnegie-Rochester conferences, about how and why particular economic ideas become embedded in particular institutions and condition their activities for long periods of time.

that is missing from his account. It is a crude simplification of Meltzer's subtle history to describe it as the story of what happened when monetary policies designed in the light of a series of variations on the real bills doctrine (to be defined below) were applied to an economy in which the quantity theory of money was a closer approximation to the truth, but to put matters this way highlights a question that still badly needs an answer: namely, why was policy so often based on misleading ideas when more accurate alternatives were available? Why did the quantity theory have so little influence on the theory and practice of central banking in the United States in the early years of the Federal Reserve System?

II

When the Federal Reserve System began operations, the theory of central banking was already more than a century old, as Meltzer stresses, and such institutions had long existed elsewhere. The United States had done without one, but they had not done all that well. Serious financial crises involving important bank failures continued to plague the United States long after they had become things of the past, for example, in Britain. After the crisis of 1907, then, there began to emerge a consensus that some kind of institutional overhaul was needed, but not about the form it should take.

The system that Congress created in 1913 was a compromise.[3] It consisted of not one national central bank, modelled on the then privately owned and highly independent Bank of England, as some had wanted, but of twelve regional central banks, whose activities were to be overseen and perhaps co-ordinated from Washington. Thus the benefits of an "elastic currency" provided by an institution (or rather twelve of them) that could also act as a "lender(s) of last resort" in times of crisis, would be made available to the American banking system. The power that a single such institution based in New York might have wielded was diversified away from that centre to be shared with eleven others, while the influence of private interests over policy was balanced by making the Secretary of the Treasury and the Comptroller of the Currency *ex*

[3] Meltzer tells us rather little about the deliberations and debates that led up to this compromise. Readers who wish to know more about these matters should consult Robert Dimand (2002) and Perry Mehrling (2002).

officio members of the Washington based Federal Reserve Board. These arrangements did not eliminate the tensions that had led to their creation, however; they merely provided a new arena in which they could play themselves out, and much of Meltzer's book deals with interactions between the Board and the New York Bank, with other regional banks either shifting their allegiance between these two, or, on occasion, forming coalitions of their own.

In 1913 the United States was already an important participant in a world economy, where adherence to the rules of the gold standard was taken more or less for granted. But the largely peaceful and open international order of which the gold standard formed a vital component was destroyed by the first World War. Though the US was a combatant only in that war's final year, its effects on the new central bank were profound and permanent. Not only did the Fed have to cope with the immediate tasks of assuring that the government's military expenditures were financed, and of dealing with the domestic impact of the gold flows generated by the suspension of the gold standard in Europe, but, once the war was over, it had to learn how to operate in a world where the rules of the gold standard imposed essentially no constraints on domestic policy.

Furthermore, the restoration of order to the international monetary system presented a major challenge in its own right, which the Fed could hardly ignore, and here its task was further complicated by the dominance of isolationism in the US politics of the 1920s. Meltzer seems to me to pay insufficient attention to this last fact, and readers who wish to follow up its implications in more detail are referred to Priscilla Roberts (2000), a recent and important study of Benjamin Strong, who was Governor of the New York District Bank from its foundation in 1913 until his death in 1928, and a dominant figure in the system. Roberts' work, which presumably appeared too late for Meltzer to make use of, is an important supplement to his account of Benjamin Strong's relations with other central bankers, notably his friend Montague Norman, Governor of the Bank of England, and the political preconceptions that conditioned them.

We are inclined nowadays to equate Wilsonian internationalism with political liberalism (in the American sense), and isolationism with conservatism, but the fit is awkward. The central bankers of the 1920s are cast as villains in liberal myths about the period because they were devoted to the gold standard. This devotion, however, stemmed not only from their deeply conservative faith in gold as the *sine qua non* of sound money, though, as Meltzer rightly stresses, this factor was extraordinarily important, but also from their belief that the gold standard had been a vital pillar of the open world order that had been shaken in 1914, and which, in the 1920s, they wished to restore.

Benjamin Strong shared these ambitions with Norman, not to mention a belief, inherited from the pre-war system, that international monetary co-operation was a matter for central bankers and not politicians, and these facts interacted with the prevailing isolationist political climate to bring it about that the Governor of a district bank of the Federal Reserve System became the principal architect of America's policy in international monetary matters. Though, as Lester Chandler (1958) long ago assured us, and as Meltzer's account seems to confirm, Strong never acted on international issues without the knowledge of the Federal Reserve Board, of which the Secretary of the Treasury was at that time a member, initiatives in this area invariably came from Strong, not the Board, let alone the Administration. This was surely anomalous: during and after World War 2, the task of negotiating new international monetary arrangements fell to the Treasury, not the Fed, as Meltzer recounts, while, more recently, the Maastricht Treaty, which has created the European Central Bank as a textbook example of an independent central bank, nevertheless reserves international monetary questions for the Union's highest political body, the European Council.

Even so, this is not to say that Strong in particular, or the Fed in general, used its *de facto* independence to sacrifice any domestic goals for the sake of international co-operation in the 1920s. Between 1923 and 1929 the Fed delivered price stability, even mild deflation after 1927, and not the inflation that restoration of the gold standard, with sterling at its pre-war parity, called for. It would have been hard to do otherwise in the light of prevailing public opinion, but, having a great aversion of his own to inflation, Strong did not wish to do so.

Meltzer, commenting on Barry Eichengreen's (1992) view that the failure of international monetary co-operation in the 1920s did much to set the scene for the catastrophe of the 1930s, suggests that behind that failure lay another: namely one of economic analysis on the part of central bankers, who did not fully appreciate that they ". . . had to choose between short- and long-term objectives", that "To get the gold standard operating . . . automatically . . either Britain had to deflate or the United States had to inflate . . .changes that neither country would accept." (p. 210) Roberts (p. 91), however, shows that Strong's aversion to domestic inflation went along with a much clearer understanding than Meltzer credits him with of what that implied for prices elsewhere in the world if the gold standard was to be restored, and that this knowledge did exactly nothing to reduce the aversion in question.[4]

> ". . .if they would be sensible enough to get their own houses in order and manage their own damn currency in a sensible and civilized fashion, they would shortly be able to come over here and get the gold they need to present a respectable monetary face to the world. I am thoroughly tired and impatient of the ravings of these inflationists who want us to play the part of cat's paw and pull their chestnuts out of the fire when they haven't the courage to do it themselves." (Strong to Carl Snyder, Feb. 4th 1924, as quoted by Roberts, p. 91)

III

As Meltzer demonstrates, that economic principle nowadays known as the *real bills doctrine,* whose origins go back at least to the eighteenth century, was the single most important influence

[4] According to Roberts these remarks were provoked by John Maynard Keynes, probably given their date and content, by the *Tract on Monetary Reform* (1923), whose American edition appeared in 1924. Roberts also suggests that Strong's aversion to Keynes might have been strengthened by suspicions, based on the *Economic Consequences of the Peace* (Keynes 1919) that he was "pro-German". This was a serious issue in Wilsonian internationalist circles. Paul Warburg, who had played a prominent role in the Fed's creation was not re-appointed to the Board in 1919 apparently because of his German family connections, though his war-time behaviour had been exemplary. Warburg's brother Max and Carl Melchior, both of the Warburg Bank in Hamburg, had advised the German delegation at Versailles on financial matters.

over the system's domestic policies in its early years, with elements of it actually being written into the 1913 Act. This doctrine had it, first of all, that the fundamental productivity of banking stemmed from the provision of short term credit to business in order to finance inventories and work in progress; secondly, that, if this principle was adhered to, then the banks' activities could not themselves be a source of economic instability, either inflationary or deflationary; and it was often extended to imply, thirdly, that, if the banks went beyond real bills and financed "speculative" private investments on a systematic basis, then "inflationary" problems would surely follow, inevitably (the word is used literally) to be succeeded by financial crisis and dislocation of the real economy as the imbalances thus created were unwound.[5]

In 1913, when gold convertibility still anchored the price level, a central bank that acted in accordance with the real bills doctrine to meet the domestic "needs of trade" for an elastic supply of bank credit against such a background could not do much harm.[6] In the 1920s, however, the inadequacies that were always latent in that doctrine were more difficult to overlook. In particular, though it advised that banks should discount only (but all) good quality bills offered to them, it was silent on how to choose the interest rate at which such credit was to be granted. Under the gold standard, international movements of the metal had indicated when policy was tight or loose, and when interest rates should be lowered or raised, but with the international monetary system in disarray, and America's own system insulated from gold by the sterilisation of inflows, these signals were no longer available. The Fed badly needed some new

[5]Thomas J. Sargent and Neil Wallace (1982) appropriated the label "real bills doctrine" and attached it to a policy prescription that "asserts that unrestricted intermediation either by private banks or by a central bank has beneficial economic effects and should be promoted by public policy" (p. 1212) This doctrine, which they contrasted with an extremely primitive version of the quantity theory, is, at best , only tangentially related to the historical real bills doctrine, and though their paper stands as an important contribution to modern monetary economics, their attempts to relate its analysis to earlier debates in monetary economics were misleading.

[6] I refer here to an elastic supply of credit rather than currency. Exponents of the real bills doctrine often confused the latter, which has to do with the central bank's capacity to supply bank notes at harvest time, as well as in financial panics which usually occurred at that time of year, with the former, which has to do with the alleged desirability of discounting good quality commercial paper at all times, and they also confused bank credit with the deposit liabilities that appeared on the other side of the banks' balance sheet. Lauchlin Currie, whose (1933) paper Meltzer rightly praises, as did Chandler (1971), provided a masterly contemporary account of these confusions, that went far beyond the merely semantic.

operational guidelines, therefore.

Before 1935, each district bank was able to set its own discount rate, and was, in effect, operating within a national monetary system that resembled a small-scale gold standard world of its own. That is perhaps why many of their Governors never really appreciated that the real bills doctrine was at best inadequate, and at worst downright misleading, as a guide to policy at the level of the system as a whole, but even some members of the Board in Washington, notably Adolph Miller, the only one with credentials as an academic economist, apparently remained strong supporters of the real bills doctrine throughout the 1920s. Its inadequacies were best appreciated within the New York District Bank. In the nation's international financial centre, it was harder not to recognise how profoundly the dislocation of the international gold standard had affected the rules of the domestic monetary policy game.

Meltzer's treatment of the interplay of ideas about these matters within the Fed from the 1920s onwards is a highlight of this book, and there is no space here to do justice to its many nuances. Suffice it to say that he convincingly shows that there was more to these interactions than a straightforward conflict between the Board and New York, with other district banks looking on. For example: Benjamin Strong moved away from the real bills doctrine early in the 1920s, but his conflicts with Miller thereafter often had as much to do with their personal dislike of one another as with their different ideas about policy; in the early 1930s, Miller too abandoned the real bills doctrine and advocated vigorous open market operations, while Strong's vacillating successor at the New York bank, George Harrison, sometimes opposed them; and so on. It is also notable that the first-named of the originators of the Riefler-Burgess doctrine, in terms of which the Fed's attempts at "credit control" in the 1920s were designed, was at the Board, while the other was at New York. In short, in Meltzer's story, it was economic analysis, much more than geography, which defined divisions with the Federal Reserve before 1935, with personalities playing a supporting role.[7]

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[7] As Meltzer notes, this conflict of ideas was vividly reflected in the Board's tenth *Annual Report* (for 1923, but published in 1924) This *Report* attracted much academic attention in both the US and the UK. See for example, Charles Hardy (1932) and Dennis Robertson (1928). Thomas Humphrey (2001) has recently published an excellent

The Riefler-Burgess doctrine started from the observation that member banks tended to reduce their borrowing from the Fed when it made open market purchases of securities, and increased them in the wake of open market sales. This “scissors effect” was explained by postulating that the banks were always reluctant to be in debt to the Fed, and it was argued that, as a result, their level of indebtedness could be used as an indicator of the stance of policy. Open market purchases thus gave the banks the funds needed to reduce their discounts, and eased policy, while sales forced them to borrow, and tightened it. In the 1930s, as positive excess reserves built up in the system, Meltzer suggests that this same doctrine was extended to imply that their growing level could be interpreted as a loosening of policy.

In making open market operations one of its central features, the Riefler-Burgess framework took the theory of monetary policy well beyond the passivity of a pure real bills approach based on discounting, but it was nevertheless vague about the significance of interest rates in the policy process, just as was the real bills doctrine itself. Indeed, Thomas Humphrey (2001) is inclined to treat Riefler-Burgess ideas as extensions of, rather than separate and distinct from, the real bills doctrine. Fed officials were in the habit of reading the absolute value of nominal rates as indicating the stance of policy, often with little regard for the state of the demand side of the market for bank credit, and invariably with none at all for the all-important distinction between real and nominal interest rates. Such confusion permeated the system even as stabilisation policies based on Riefler-Burgess principles were implemented, and Meltzer shows convincingly from his study of the archives that a lack of clarity about these matters made a major contribution to the policy fiasco that began in 1930.

The monetarist explanation of the Great Contraction of 1929-33, which underlies Meltzer’s account, is well known.[8] By the summer of 1929, a stock market boom was entering

account of debates about the theory of monetary policy within the system in the 1920s that pays careful attention to it.

[8] A pure monetarist analysis would presumably hold the slowdown in money growth that began in 1928 responsible for the initial real slowdown, but Meltzer is too subtle to commit himself to so simple and mechanical an

what proved to be its final stages, and the real economy was beginning to slow a little. It looked as if a cyclical upswing, more distinguished by its length and vigour than by any truly out-of-the-ordinary features, was coming to end. The collapse of the stock market in October of that year destabilised the financial system, and the Fed, one of whose functions in such circumstances was supposed to be to provide lender of last resort facilities, both to individual institutions and to the market, responded indecisively and half-heartedly. It did keep the monetary base growing slowly throughout the following three years, but the money supply contracted sharply, as banks and the non-bank public scrambled to increase their currency holdings. In part, the Fed's hesitancy stemmed from fears (probably unfounded) about the adequacy of its gold reserves, and in part it stemmed from the fact that disagreements about what action to take were impossible to resolve quickly within its clumsy decision making structure.[9]

But the most important source of trouble in Meltzer's view was the influence of economic ideas. Both the real bills and Riefler-Burgess doctrines suggested that low nominal interest rates and excess reserves in the banking system indicated that monetary policy was loose. A majority of decision makers within the Fed were thus able to convince themselves, and many others too, that policy was expansionary and that its failure was the result of an inherent weakness of monetary measures in the face of the economy's collapse.

Not all contemporary observers agreed. Lauchlin Currie, an instructor at Harvard, who would become the principal economic advisor to Governor Marriner Eccles in 1935, described the Fed's policy in 1929-33 as ". . . actually one of almost complete passivity and acquiescence" (Currie, 1934, p. 147), as Meltzer notes. Moreover, as early as 1932, Jacob Viner complained

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explanation, particularly given the attention he pays to the international considerations throughout his account of the period. Like Friedman and Schwartz, his monetarist explanation of the Contraction is mainly directed at why it became so severe after 1930.

[9]The issue concerned the requirements for the gold backing of Federal Reserve notes written into the Federal Reserve Act. To the extent that this was ever a genuine problem, it was resolved by the passage of the Glass-Steagall Act of 1932, but before then, rightly or wrongly, many commentators believe that these requirements need not have constrained policy. Meltzer (pp.354-358) and Friedman and Schwartz (1963 pp.404-406) discuss these matters in some detail.

about “a Federal Reserve Board with an attitude towards its functions resembling with almost miraculous closeness that of the Bank of England during its very worst period” (p. 28), surely referring to the years of the Bullion Committee, 1809-1810; at that time, Directors of the Bank expressed views, derived from the real bills doctrine, which (as Meltzer notes, p.55, fn 43) Walter Bagehot later described as “almost classical by their nonsense.” And, it is worth noting, Currie’s (1934) book also contained a chapter, essentially a reprint of his (1933) *JPE* article on “Treatment of Credit in Contemporary Monetary Theory”, that criticised in detail the adequacy of the real bills doctrine and related ideas as a basis for monetary policy.

Meltzer’s interpretation of events is hardly novel, then, nor does he make that claim; but his use of the archives to document the extent to which real bills and related ideas permeated policy discussions within the system, and of the absence from those discussions of ideas about the importance of the quantity of money and the real-nominal interest rate distinction, is more than enough to establish the importance of his new version of this old story. Even those officials within the system who showed themselves capable of thinking beyond the bounds of prevailing doctrines, and argued for more expansionary policies than were in fact implemented - Adolph Miller at the Board, for example, and Randolph Burgess in New York - seem to have been oblivious to the latter distinction.

Now when Friedman and Schwartz (1963) finally established the respectability of the view that the Great Depression was the consequence of a failure of monetary policy, this was seen as a deeply “conservative” development within macroeconomics. In the early 1960s, mainstream opinion had it that the Depression provided clear evidence of a deep flaw in the very mechanics of the market economy that prevented it making use of all available productive resources, or, as it was often put, evidence that Say’s law was fallacious. This view provided the rationale for the activist agenda, based on fiscal tools, that dominated the policy scene in the post-World-War-2 years. In the 1930s, however, those who questioned Say’s Law, and those who took the more modest position that it was important to get monetary policy right, were in the same policy-activist camp, arguing against others who believed that, once it had started, the right policy was to let the Depression take it course.

The latter view derived directly from the real bills doctrine, and its exponents often saw the seeds of depression as having been sown by the discount rate cuts implemented by Benjamin Strong in 1927 to help Montague Norman maintain the newly re-established convertibility of sterling into gold at its pre-1914 parity.[10] These cuts, it was argued, had encouraged credit creation in the United States on a scale greater than the needs of trade required, which had therefore fuelled "speculative investment" in the stock market and an unsustainable investment boom. To make matters worse in the eyes of his critics, shortly before his death in 1928, Strong had opposed attempts by the Fed to limit the purposes for which bank credit was to be used. According to the real bills doctrine, the inevitable consequences of speculative lending were a financial crisis and a slump that simply had to be endured in order to rid the economy of the imbalances created during the preceding boom.

The fact that such reasoning was used by, among others, Herbert Hoover himself, to make Strong a scapegoat for a Depression that had happened after his death is perhaps one reason why those who like to pin much of the blame for the Depression on Hoover also sometimes try to enlist Strong as an economic saviour manque, who might have prevented the catastrophe. It is also tempting for those who are more inclined to lay responsibility at the door of a Fed dominated by the real bills doctrine to take a similar view, and Meltzer flirts with it, albeit a little more hesitantly than did Friedman and Schwartz.

To the extent that the Fed's weak and vacillating policy towards the depression stemmed simply from indecision brought on by intellectual muddle, Strong's presence would surely have

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[10] There is strong similarity between these views, and those that derived from Austrian business cycle theory as expounded by, for example, Friedrich von Hayek (1931) and Lionel Robbins (1934), which made some inroads into the American academic community in the early 1930s. See, for example Gottfried von Haberler's (1932) paper written when he was a visitor at Harvard. These two apparently parallel strands in the literature had a common ancestry in English Banking School theory, which had considerable vogue in German language academic circles from the late 19th century onwards, and the connections between them would merit further research.

made an enormous difference, because he was nothing if not decisive and clear headed. If furthermore, as Meltzer (p. 409) speculates, Strong had indeed set aside the Riefler-Burgess doctrine after 1930 (as Burgess himself did for a while), those qualities might well have enabled him to ensure a much prompter and more coherent policy response on the Fed's part to the onset of the contraction, and if that response had been suitably vigorous, all might have been well thereafter. But Strong's reduction of rates in 1927 was followed in 1928 by a failed effort on his part to get the Fed to *raise* them again in order to cool the stock market. That was his preferred alternative to a policy of trying to direct lending into particular channels.

In 1930, therefore, it is not inconceivable that Strong could have joined the majority of his colleagues in thinking that a little time was needed for imbalances to iron themselves out in the wake of the initial crisis, nor, given his extreme aversion to inflation and deep commitment to the gold standard, is it easy to see him advocating expansion on the scale that was needed by 1932. In the early 1930s, that is to say, Strong might well have hesitated to take what would have been widely perceived as serious risks. As Meltzer shows, Oliver Sprague of Harvard was no supporter of vigorous expansion in those years, and, according to Chandler (1958, p.51), he was the academic economist on whom Strong most often relied for advice, a connection that Meltzer misses. Strong would at least have taken him seriously.

IV

Counterfactuals are inherently untestable, so we can never be sure what would have happened had Strong lived. But to this reviewer, Meltzer's arguments for the primacy of economic ideas, supported by inadequacies of institutional structure, in explaining the conduct of monetary policy during the Fed's first peacetime years, and hence the policy failures of the 1930s, are convincing. Be that as it may, by 1935 the price of gold had been raised, monetary policy had eased, and, crucial to the next stage in Meltzer's story, the structure of the Fed had also been radically over-hauled, with new ideas being brought into the system by the Utah banker Marriner Eccles, who joined the Board in 1934 and remained as its Chairman until 1948.

The Fed that emerged from the 1935 Federal Reserve Act, of which Eccles, aided by Lauchlin Currie, was the major architect, was essentially the one that still exists. The Governors of District Banks became Presidents, and the Federal Reserve Board was reconstituted as the Board of Governors, with the Secretary of the Treasury and the Comptroller of the Currency losing their *ex officio* positions. The power to make monetary policy was shifted decisively to a redesigned Federal Open Market Committee on which Governors of the system were given a permanent voting majority. Thus, the ambiguities about whether ultimate authority over policy belonged to Washington, or to the District Banks in general, or to the New York in particular, that had plagued the system since 1913, were resolved in Washington's favour, but, at the same time, the executive branch's power to exert direct influence was removed.

In 1935, then, the Fed took on a form that should have enabled it to become, to use a phrase later popularised by William McChesney Martin Jr. (but, according to Meltzer, p. 713, fn., originated by Allan Sproul) "independent within the government". In fact, however, the Fed exercised far less independence after 1935 than in the 1920s. Under Eccles, it took a place "in the backseat", to use the title of Meltzer's chapter on the 1933-42 period, and remained there until 1951. The main reason for this surely lay in the general intellectual climate of the New Deal, which stressed fiscal policy and regulation over less direct methods of promoting expansion, but the particular ideas brought to Washington by the new Chairman were also important.

Meltzer describes those ideas correctly - Eccles believed that income redistribution and expansionary fiscal measures supported by monetary policy were the keys to the restoration of prosperity to the United States - but he overlooks their source. This, according to Sidney Hyman (1976, pp. 71-73, 91-93) was the underconsumptionist economics of William Truffant Foster and Waddill Catchings which had made a considerable intellectual splash in the United States during the 1920s In the words of one of their more distinguished academic followers of the time, Paul Douglas of the University of Chicago, later a United States Senator from Illinois who played an important part in helping the Fed to re-establish its independence from the Treasury in the post-war years (see Meltzer, pp. 685-90), Foster and Catchings had uncovered "an extraordinary error of logic" (Douglas, 1927, p. 37) in orthodox economics underpinned by Say's law, and they concluded that a market economy would always operate at less than full employment unless stimulated by government spending funded by money creation. In their view, (Foster and Catchings 1925, pp. 338-339), the Fed's wartime policy of financing bank lending to the public to enable them to buy Liberty Bonds and hence provide the means for government spending, under the slogan "Borrow and Buy Bonds", was an example of how monetary policy should always be conducted; small wonder that, under Eccles leadership, monetary policy's principal role was to support fiscal policy.

But it was also under his leadership that the Fed helped to precipitate the sharp recession of 1937-38, and here his new ideas were not to blame. As Friedman and Schwartz (1963, Ch. 8) documented, the US banking system had begun to accumulate excess reserves after 1933, and by 1936 these had grown to the extent that actual reserve ratios were at roughly twice their required level. This development was widely interpreted, inside but also outside of the Fed, as signalling increasing monetary ease, and hence as carrying with it considerable potential for inflation should the banks suddenly begin lending. Reserve requirements were therefore significantly increased to forestall this possibility, in the expectation that this would have no effect on current monetary conditions. In fact, however, the banks took quick action to restore their free reserves to previous levels, interest rates rose, the money stock shrank and a recession ensued. Though some commentators are inclined to attribute the last of these events to a tightening of fiscal policy that also took place in 1937, a viewpoint of which Meltzer gives a full and respectful account, his decision to follow Friedman and Schwartz in attributing the 1937-38 recession to monetary policy is well supported by the evidence.

Meltzer argues, correctly, that the Fed's rationale for increasing reserve requirements was what one might have expected from policy makers still acting under the influence of the Riefler-Burgess doctrine, and he is also right in suggesting that what was missing from the Fed's analysis at this time was the idea that the level of excess reserves might be a variable chosen by commercial banks in accordance with a well defined demand function, in which their perceptions of risk, as well as the opportunity cost of holding reserves would play important roles. But it was not only adherents of the Riefler-Burgess doctrine who lacked such an idea. Eccles' advisor Lauchlin Currie had only recently published an explanation of the Great Contraction which closely anticipated the monetarist explanation of Friedman and Schwartz. He was, quite demonstrably, no supporter of the Riefler-Burgess doctrine, or of any other approach to monetary policy that did not put the quantity of money at the centre of things, but he actively supported the 1936-7 measures.

Currie's quantity theoretic approach to monetary policy differed strongly from that of Henry Simons and his associates at Chicago in advocating discretionary measures rather than rules. In common with them, however, he held a view of the relationship between bank reserves and deposits in which variations in excess reserves reduced the Fed's ability to control the money supply because they were unpredictable. That is why, in 1934, at the request of Jacob Viner, he prepared a memorandum for Secretary of the Treasury Henry Morgenthau, advocating the imposition of 100 per cent. reserve requirements against demand deposits, at about the same time as the essentially similar Chicago Plan for banking reform, described by Albert G. Hart (1935). emerged.

As Ronnie J. Phillips (1995) has documented, vigorous efforts to have 100 per cent reserves written into the 1935 Federal Reserve Act were made by Currie within the system, and several others outside it, but they came to nothing. As a result, in 1936, there were many quantity theorists, including Simons (1936, fn. 18), who were every bit as worried as Currie, or any adherent of the Riefler-Burgess doctrine, about imminent inflation.[11] Meltzer discusses Currie's views on 100 per cent reserves (p. 467, fn. 107, and p. 474) but not the rest of the literature, and he only touches lightly on their *raison d'etre.* This is perhaps why he attributes to only one

[11]Currie remained convinced until the end of his life in 1993 of the inflationary threat implicit in the build up of excess reserves in the mid-1930s, and of the appropriateness of raising reserve requirements in order to deal with it. Interestingly, the abovementioned footnote from Simons is heavily marked in Currie's personal copy of the paper, though when this was done is unknown. I am indebted to Currie's biographer, Roger Sandilands, for this information.

particular approach, the Riefler-Burgess doctrine, a gap which affected the whole body of monetary economics at that time, including its quantity theory arm: namely, an absence of serious empirical work on what George Morrison (1966) would later call the *Liquidity Preferences of Commercial.* Such work only began with Arthur Brown's (1938) study of the London Clearing Banks.[12]

By the time the economy had recovered from 1937-38 recession, World War 2 had begun, and the United States would eventually join it in December 1941. Thus, the exigencies of war finance pushed the Fed even further into the back seat of macroeconomic policy. Preparations for the restoration of order to the international monetary system began well before the war's end, but with isolationist tendencies at an essentially permanent low ebb in the political arena, there was no vacuum here for the Fed to fill, as it had after the earlier conflict. The negotiations that led to the creation of the Bretton Woods system, the financial arrangements associated with the reconstruction of Europe, and so on, were all handled by the Treasury, with the Fed. playing only a relatively minor advisory role.

The major issues with which Meltzer's first volume ends are, therefore, the growing tension between the Fed and the Treasury about debt management, and the Accord of 1951 under which the executive branch of government conceded power over interest rates to the central bank, thus finally establishing its "independence within government" nearly four decades after its foundation. Meltzer's account of this affair makes fascinating reading, though some of its novelty has been pre-empted by Robert L. Hetzel and Ralph F. Leach (2001), whose paper must have appeared too late to be taken into account by him.

The Treasury was anxious to minimise its debt service costs, particularly after the outbreak of the Korean War, and was supported by President Truman, who, having lost money

[12] Meltzer pays little attention to this literature, citing only Peter Frost (1966). Friedman and Schwartz (1963) refer to Morrison's work, and James Meigs'(1963) study of *Free Reserves and the Money Supply*, the first in the context of the build up of excess reserves after 1933, and the latter in the course of their discussion of what Meltzer calls the Riefler-Burgess doctrine.

on his holdings of Liberty bonds when interest rates had risen in 1920-21, was not about to inflict similar trouble on others. The administration thus wanted the final say over decisions about interest rates, and wanted to keep them low. This brought it into sharper and sharper conflict with the Fed because the latter, rightly, feared the inflationary consequences of holding rates down, and in any event believed that the prerogative to make such decisions belonged to the central bank. Matters came to a head when, in the wake of an unprecedented White House meeting between the President and Federal Reserve Board, the administration announced that the Board would continue to bow to the Treasury's will in these matters. Marriner Eccles, perhaps still smarting from his replacement as Chairman of the Board in 1948, and about to retire as a Governor, then made available to the press the Board's own minutes of the encounter, which recorded explicitly that no such concession had been made.

The hearings that Senator Paul Douglas had held on these and related issues, beginning in the fall of 1949, not to mention much subsequent public discussion, had already created considerable political and public support for the Fed's position, and this support helped to ensure that, in the ensuing uproar, the Fed prevailed and regained control over the key instruments of monetary policy. According to Meltzer, Truman climbed down with reasonably good grace, though he quickly shifted William McChesney Martin Jr. from his position as assistant-secretary of the Treasury (in which capacity he had been deeply involved in pre-Accord negotiations with the Fed) to the chairmanship of the Board.

Meltzer does not speculate on whether this appointment was intended to bring to Board to heel, though he does mention that Paul Douglas voted against confirmation out of just such fears.[13] If this was Truman's aim, however, he had chosen the wrong candidate, for Martin had close family connections to the system, his father having been Governor of the St. Louis Fed from 1928 to 1938, and he became the principal architect of the Fed's growing independence

[13] The processes whereby Paul Douglas, in the 1920s and 1930s a distinguished labour economist with a strong taste for economic planning and a supporter of underconsumptionist doctrine, became a moderate Democrat with orthodox views on monetary policy is mysterious. Douglas (1972) was remarkably unrevealing about his inter-war beliefs in his autobiography.

from the Treasury in the 1950s and early 1960s. Hetzel and Leach (p. 52) record that, some years after the Accord, on encountering Martin by chance on a New York street, "Truman stared at him, said one word, 'traitor,' and then continued". But perhaps there was a twinkle in the former President's eye as he spoke, and in any event, Meltzer rightly praises him for fighting the Korean War on a balanced budget and without resort to the printing press. Truman therefore surely deserves his share of the credit for laying the groundwork for the decade of monetary stability with which Meltzer's next volume will begin.

V

In 1951, the Fed finally achieved a reasonable degree of autonomy in policy making, but its internal deliberations remained largely uninformed by ideas associated with the quantity theory of money, this despite the fact that such ideas have always played an important part in the development of the theory of central banking from its very beginnings in the British Bullionist controversies of 1797-1821. There is a major puzzle here, which Meltzer certainly recognises, but he does not offer a satisfying solution to it, largely because his first substantive chapter on "The Theory and Practice of Central Banking before the Federal Reserve Act" is highly selective in the material it covers.

This chapter devotes the first thirty two of its forty four pages to the development of ideas about central banking in Britain, notably about the Bank of England's lender of last resort responsibilities, from Henry Thornton's (1802) *Paper Credit* (and his 1797 evidence to various Parliamentary committees) down to Walter Bagehot's (1873) *Lombard Street.* Now Thornton was an astonishingly creative thinker, whose ideas persisted in the literature long after his own reputation had faded, while *Lombard Street* codified a selection of ideas from the tradition that Thornton had started into what Frank Fetter (1965) rightly called *British Monetary Orthodoxy*, which informed Bank of England policy from the 1880s until 1914. *Lombard Street* itself was, furthermore, well known to many of those involved in the Fed's creation and early years, not least Benjamin Strong. Some of this material, therefore, particularly (but not solely) as it bears on the development of ideas about the central bank's lender of last resort role, is certainly relevant to this book.[14]

Meltzer, however, treats 19th century British thought in so much detail that he leaves himself little room to discuss a great deal that happened from the 1870s onwards, not least in the United States, which profoundly influenced the form that the Fed took in 1913 and the ideas which found their way into, or were kept out of, the system. Irving Fisher's work is discussed, and Meltzer rightly pays tribute to its quality. He also justifiably laments that Fisher's ideas about the role of the quantity of money in monetary policy, and the real-nominal interest rate distinction, had no influence on policy for a good four decades after he developed them. Crucially, however, Meltzer leaves it unclear why such ideas made so little headway outside of academic discourse during his period.

I suggest that a major missing link in his story is the highly politicised controversy about bimetallism, to which the slow deflation that began in gold standard countries in the early 1870s and persisted till the late 1890s, gave rise. This controversy reached its climax in the United States with the 1896 presidential election, in which the populist Democrat William Jennings Bryan - "you shall not crucify mankind upon a cross of gold" - was defeated by William McKinley, though matters were not finally settled until the passage of the Gold Standard Act in 1900 and Bryan's second defeat in that year's election (Friedman and Schwartz 1963 pp. 118-119). In Britain, the debate was less sensational, but it did attract much public attention and prompted the setting up of the important *Gold and Silver Commission* that reported in 1889.

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[14] I have some reservations about Meltzer's treatment of Thornton. He gives Thornton almost equal credit for ideas that he self-consciously developed at considerable length in more than one place, and which were central to his contribution - for example his devastating critique of the real bills doctrine - and for others that he mentioned only in passing, and which had to be rediscovered by others - such as the distinction between the real and nominal interest rate, which he made only once, in an 1811 House of Commons speech in support of the Bullion Report. Meltzer also downplays some non-monetarist themes that were central to Thornton's work - for example his insistence that bills of exchange formed an important part of the "circulating medium". *Paper Credit* was, in any event, little known in the 1920s. Jacob Hollander (1911) and James Angell (1926) both confused Henry Thornton with his brother Samuel, who was a Director and sometime Governor of the Bank of England, approached the book as an apologia for the Bank, and failed to appreciate its merits. Jacob Viner (1924) dealt only with Thornton's treatment of the transfer problem.

Economic ideas lined up in essentially identical ways in both countries. Those who favoured the introduction of silver into a bimetallic monetary system defended their position, as I pointed out in Laidler (2000), by deploying the quantity theory to demonstrate that such a reform would enable deflation to be brought to an end. Their number, however, included many outright inflationists, whose extremism both embarrassed their more responsible allies, and made an easy mark for defenders of the gold standard. Notable among the latter group were Sir Robert Giffen in Britain and James Laurence Laughlin in the US. Giffen, a leading public intellectual of his day, had been Bagehot's assistant editor at the *Economist,* and remained thereafter a promoter of of Bagehotian common sense in monetary matters, while Laughlin, the first professor of economics at the University of Chicago, had forged strong ties to the Republican Party in the 1890s. Both were profoundly conservative in their economics, using a cost of production theory of value to attack the quantity theory and to defend gold monometallism as the only natural basis for the monetary system, and Laughlin was also a powerful exponent of the real bills doctrine.

The upshot of all this was that, at the time of the Fed's creation, practical people in general, and bankers in particular, who were unquestioning supporters of the gold standard, regarded the quantity theory of money as discredited, and essentially synonymous with inflationism. This state of affairs largely accounts for which ideas influenced the Fed in its early years and which did not. Bagehot's *Lombard Street* had a direct influence on some of the System's founders, but, despite its great wisdom about the conduct of monetary policy under the gold standard, it was not a quantity theory based book.[15] As to Laughlin, though he was prevented by his Republican ties from participating actively in the Fed's foundation, his student Henry Parker Willis, as a House Banking Committee staff member, drafted much of the Federal Reserve Act, and ensured that his ideas were well represented in that legislation. Willis, moreover, continued to be influential within the system as secretary to the Board in the 1920s,

[15]Bagehot fails two acid tests for quantity theory credentials. He systematically used the word "money" when he meant "credit", even in the book's subtitle - *A Description of the Money Market,* and he characterised the rate of interest, rather than the inverse of the general price level, as the "value of money" in the title to Chapter 5 of the book, among other places. Indeed, his (1875) review of Jevons' (1875) *Money and the Mechanism of Exchange,* and particularly his criticism of its suggestions for indexation, suggest that he had great difficulty understanding the very concept of a price level.

and he and Laughlin were both vehement opponents of expansionary monetary policy in the early 1930s. (See Willis 1932, and Laughlin 1933)

The quantity theory remained an object of suspicion even when it was not directly associated with bimetallism, and was expounded by sophisticated academics, because they lacked an unquestioning commitment to the gold standard as the only possible foundation for a monetary system. It is a remarkable fact, stressed in Laidler (1991), that none of those whom we would now regard as the leading monetary economists of the period, for example Alfred Marshall, Knut Wicksell, as well as Fisher, took sides in the bimetallic controversy. Each proposed his own scheme, which he thought would be better than either the gold standard or bimetallism, but these ideas attracted little immediate support. Wicksell advocated the use of discount rate policy to stabilise the price level, a programme that was eventually implemented in Sweden in the early 1930s, as Lars Jonung (1979) has pointed out. Marshall opted for symmetallism - the pegging of sterling to a fixed weight basket of gold and silver - accompanied by the indexation of loan and money wage contracts, but this suggestion got nowhere.

As for Fisher, he explicitly wrote his *Purchasing Power of Money* (1911) to re-establish the quantity theory's intellectual respectability in the wake of the bimetallic controversy, and, by implication, as a critique of Laughlin's approach to monetary economics. He also proposed a "compensated dollar", whose gold content would vary with the relative price of that metal, as a basis for Federal Reserve operations, an idea that eventually had an indirect influence on Franklin Roosevelt's policy towards the price of gold in the early 1930s. Meltzer notes that Fisher was widely regarded by central bankers as a "bright but annoying crank" (p. 53), and this he certainly was: in addition to stable money, he was at various times a vigorous campaigner on behalf of healthy living, world peace, prohibition, eugenics and calendar reform (William J. Barber, Robert Dimand and Kevin Foster eds. 1997). None of this could have helped the quantity theory's case, but, all in all, it was its political associations with opposition to the gold standard, acquired during the bimetallic controversy, that kept it out of Federal Reserve thinking in the 1920s, rather than the personal idiosyncrasies of one of its exponents.

Even Benjamin Strong was hostile to the quantity theory. He apparently saw some merit in the heavily nuanced version of Fisher's proposals to give the Fed a legislated price stability mandate that were embodied in the (Congressman James) Strong Bill of 1928, but, in the earlier 1920s, he still associated price stability proposals with "quantity theory extremists" (Meltzer p. 184, fn. 76, Chandler 1958,. p. 203). Recall too that his swingeing 1924 comments on "inflationists", quoted above, were in all likelihood aimed at Keynes, the author of the recently published *Tract on Monetary Reform* which was then, and still remains, the very epitome of Marshallian quantity-theoretic orthodoxy.

The association of the quantity theory with inflationism from the 1880s onwards accounts, I suspect, not just for its marginalisation among central bankers in later years, but also for the fact that, even in the early 1930s, those among its exponents who were also defenders of the gold standard, Jacob Viner, for example, appeared to be quite radical in their views, and sometimes found themselves in the company of a wide variety of monetary expansionists, fiscal inflationists, underconsumptionists and outright cranks.[16] I wish Meltzer had paid more attention to these issues in this volume, and I hope that in the next part of his story, he will take up the question of why, when the quantity theory, in the guise of monetarism, finally did begin to become influential in policy circles, it made its foray, not from the political left as it had in earlier years, but from the right, and found itself in conflict with versions of the real bills doctrine that by then had become the property of a Keynesian, not to mention post-Keynesian, left.

[16] Two books in particular document the interplay of these ideas in the 1930s. Joseph Reeve's little known, but invaluable, study of *Monetary Reform Movements* (1943), based on a Chicago Ph. D. thesis, better than any other single source captures the ferment of American monetary thought, both popular and academic, during the depression. It is instructive that, while acknowledging his great abilities, Reeve places Irving Fisher in the category of "Monetary Cranks"alongside the inflationist Senator Elmer Thomas of Oklahoma and the anti-Semitic "radio priest" Father Charles E. Coughlin, whose case for 100 per cent money was based on very different premises to those employed by Currie, or the Chicago economists. Frank Steindl's valuable (1995) work is more narrowly focussed on the extent to which contributors to the literature of the period anticipated Friedman and Schwartz's (1963) monetary interpretation of events.

VI

Having said all this, the very breadth of Meltzer's topic and the depth of his treatment make it inevitable that any reviewer will take issue with one or another of the many difficult judgements that went into making this book. Nothing that I have complained about above, therefore, should detract from the importance of what Meltzer has accomplished, or from the attention this beautifully produced and carefully indexed volume deserves. One can only hope that we do not have to wait too long for the second instalment.

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