

Monthly Economic Review

No. 177, March 2004

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The imprudence of Mr Brown

Futile attack on tax avoidance, as deficits return as a medium-term reality

Public spending rising towards 45% of GDP

Public spending cannot rise indefinitely as a share of GDP. One message of the 2004 Budget is that public spending is to level out as a share of GDP over the next two or three years at almost 45%, quite a bit higher than the ratio of 40% or so seen in the final years of the Conservative government. Taxes - which were only a third of GDP in 1993/4 - are to rise further to nearly 40% of GDP by 2008/9. Even allowing for non-tax receipts, significant budget deficits have returned as a medium-term reality. The public sector net cash requirement (the new name for the "public sector borrowing requirement") will be 3.9% of GDP in 2003/4, a good 1% of GDP higher than originally planned.

Mr Brown now faces political constraints on further tax rises

Mr. Brown knows that - from now on - the government can finance further rises in the ratio of government spending to GDP only by increasing the headline rates of the major taxes (i.e., the 22% standard rate of income tax and the 17 1/2% rate of VAT) or by provoking outrage on less visible taxes (old ladies refusing to pay council tax, lorry drivers rebelling against fuel duties). He is boxed in. It is therefore entirely predictable that he should initiate an attack on the apparently soft target of the rich, who are alleged to have been avoiding tax on a grand scale. The list of purported "Budget decisions" includes figures of an extra £155m. revenue in 2004/5, £465m. in 2005/6 and £925m. in 2006/7 to be raised from new "enforcement and compliance" measures. The trouble is that the well-off have considerable discretion about where they locate themselves and their assets. Mr. Brown has bullied the Cayman Islands, the Channel Islands and other British associated territories into making themselves less attractive as so-called "tax havens", but he cannot do anything about such places as Singapore, Dubai, the Bahamas, the Slovak Republic, Russia, etc., etc., that have low income tax or no income tax at all. Governments that make a fuss about attacking tax avoidance are likely to find that they have a smaller number of well-off people who will pay them taxes.

Assault on tax avoidance overlooks that the rich pay a higher share of total income tax than in the past

In any case, it is poppycock to claim that tax avoidance has been rising steeply. The Inland Revenue website has a table (www.inlandrevenue.gov.uk/stats/income_tax/table-24.pdf) which shows the proportion of total income tax paid by the top 1%, the top 5% and so on down to "the lower 50%". In the 1970s (when Mr. Denis [now Lord] Healey was "making the pips squeak") the top 1% paid just above 10% of total income tax, whereas the lower 50% paid 20%. In 2000/01 - after more than a decade of a fairly civilized highest tax rate of 40% - the top 1% paid 22% of total income tax and the lower 50% 11%. Of course, Mr. Brown and his friends may say that the inequality of tax payments reflects greatly increased inequality of pre-tax incomes. Fair enough, and perhaps that reflects the greatly increased inequality of the distribution of human capital in the UK after decades of inefficient state education.

Professor Tim Congdon

31st March, 2004

Summary of paper on

‘What is the best monetary antidote to a slump?’

Purpose of the paper

Japan in recent years, like the USA in the Great Depression from 1929 to 1933, has seen persistent weakness in demand in association with a crippled banking system and a fall in bank credit to the private sector. Should the monetary authorities react by *central bank* operations to expand the monetary base or *government* operations to purchase assets from non-banks and thereby expand the quantity of money, broadly-defined?

Main points

- Interest in the Great Depression in the USA has increased because of persistent demand weakness in Japan in recent years. Allan Meltzer’s *History of the Federal Reserve* throws new light on Fed decisions in the Great Depression.
- A common view is that the Federal Reserve should have countered the Great Depression by increasing the scale of its open market purchases and expanding the monetary base.
- However, the banks in the USA in the early 1930s - like their counterparts in Japan today - had excess cash reserves. A case can be made that expansion of the base would not have caused them to expand their balance sheets (and so the quantity of money), as they were in a “narrow liquidity trap”. (See footnote (2) and the March 2003 issue of Lombard Street Research’s *Monthly Economic Review*.)
- Despite this, expansion of the base could still have worked. Central bank purchases of assets from *non-banks* would have increased money holdings.
- But the efficiency of open market purchases in a narrow liquidity trap is much less than when the banking system is well-capitalised and keen to expand. The money multiplier has fallen from, say, a value in the double digits to only one.
- Keynes - who made this point in some remarkable analysis stimulated by a visit to Chicago (!) in 1931 - saw that it meant the central bank would have to expand its balance sheet enormously to achieve the desired increase in the quantity of money.
- In the circumstances of the USA in the early 1930s and Japan in recent years, expansionary debt management operations by the government are - politically and practically - superior to central bank operations to boost the monetary base.

This paper was written by Professor Tim Congdon. It was published, in a slightly different version, in the February 2004 issue of *Central Banking* and builds on themes in the August 2001, September/October 2001, March 2003 and April 2003 issues of this *Monthly Economic Review*.

What is the best monetary antidote to a slump?

Debt management vs. money market operations

The Fed and the Great Depression, cf. the Bank of Japan and the Japanese *malaise* in the last seven or eight years

Could the Federal Reserve have averted the Great Depression? And, once the slump had started, what should it have done to stimulate the American economy? These are key questions in central banking at the start of the 21st century, just as they were in the 1930s. Their topical relevance has been reinforced by the Bank of Japan's difficulties in overcoming the prolonged *malaise* of weak demand and mild deflation in its economy since the mid-1990s. As will be shown later in this article, the parallels between the USA in the 1930s and Japan in the 1990s are clear and compelling. The experience of the USA over 70 years ago has many lessons for Japan in the opening years of the 21st century.

Recent Meltzer history is major contribution to analysis, like Friedman and Schwartz's *Monetary History of the United States*

Hundreds of thousands of words have been written on the Fed's role in the Great Depression, but two works are pre-eminent. Friedman and Schwartz's *A Monetary History of the United States*, published in 1963, gave new data on the quantity of money backed to the 1860s and showed that fluctuations in its growth rate were fundamental to fluctuations in economic activity, including the collapse of the early 1930s. Its chapter seven remains outstanding, with a remarkable mix of narrative and analysis. More recently, the first volume of Meltzer's *History of the Federal Reserve* has thrown fresh insights into the thinking of the Fed's board members and officials by delving into old board minutes, research memoranda and other archival material. Although Meltzer's magnificent work covers the period from 1913 to 1951, its emotional core is chapter five on "Why did monetary policy fail in the Thirties?". (1) For decades to come this classic chapter – like chapter seven of Friedman and Schwartz – will be compulsory reading for central bankers.

Meltzer, like Friedman and Schwarz, believes that Fed should have conducted more expansionary open market operations

Meltzer's perspective differs from that of Friedman and Schwartz in many ways, but he agrees with them on the policy agenda. In his view, as in theirs, the Fed ought to have pursued more expansionary open market operations. In the early 1920s the Fed discovered that it could exert leverage over the economy by buying securities when demand was sluggish and selling them when it was strong. The initial stage of the transmission mechanism to the economy was the effect of such operations on banks' balance sheets. The nature of these operations became increasingly well-known as the 1920s progressed, seemed to be widely understood in the 1930s and is now repeated by monetary textbooks in their dozens.

Prescription based on a diagnosis in which the quantity of money is a multiple of the monetary base

Banks must always have some cash, either in the form of notes and coin in their tills or a reserve balance at the central bank. The cash is essential for the banks to conduct their business, as it must be available to meet customers' deposit withdrawals and payment instructions. But, because cash pays no interest and is an unrewarding asset to hold, it represents a low and generally stable proportion of total assets. When a central bank such as the Fed buys securities from the banks, it credits sums to their reserve balances. As a result they have "excess reserves". Any individual bank can try to eliminate its own excess by buying securities from other banks, but – as long as the Fed keeps the total amount of cash in the system

above the required level – that simply transfers the excess to another bank. For the system as a whole the only way to end the excess cash holding is for the banks to expand their earning assets. Expansion of assets in turn implies expansion of the deposit liabilities which constitute most of the quantity of money in a modern economy.

According to Meltzer, Friedman, Schwartz and many other economists, the answer to the Great Depression follows readily from this account. Since national income is related to the quantity of money, and since the quantity of money can be influenced by open market operations, the imperative for the Fed in the years 1930 – 33 was to conduct open market purchases on a large enough scale. The Fed’s failure stemmed not from a lack of effective tools, but from misinterpretation of the economic situation and adherence to incorrect theories.

Meltzer very effective in rebuffing incorrect theories, such as the “real bills doctrine”

Meltzer is at his most effective in describing, and then debunking, the incorrect theories. For example, he discusses the “real bills doctrine”, the claim that – as long as credit finances “real” transactions – the banking system is sound and monetary policy appropriate. Meltzer shows that the doctrine was implicit in the Federal Reserve Act and was widely held by board members even in the 1940s. But Meltzer’s most salient target is a body of thought he calls “the Riefler-Burgess framework”, which he sees as a refinement of the real bills doctrine. It was developed by Winfield Riefler, an economist at the Federal Reserve Board, and W. Randolph Burgess, a vice-president of the New York reserve bank, in two separately-authored books of 1930 and 1936.

But “the Riefler-Burgess framework” - in which the monetary situation is assessed by, e.g., bank borrowings from the Fed - is Meltzer’s main target

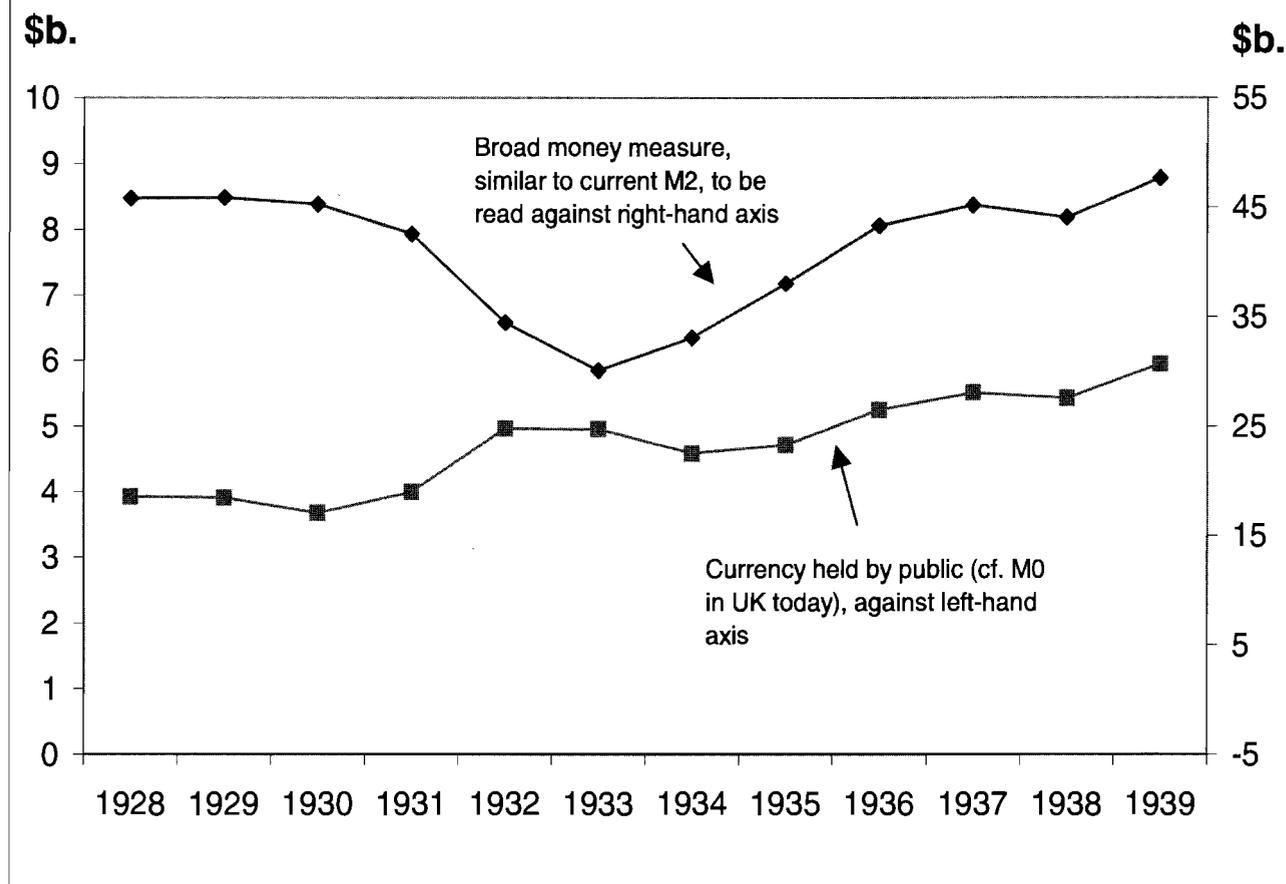
In the 1920s Riefler and Burgess – like others involved in policy-making at the time – recognised the link between the Fed’s activities and macroeconomic outcomes, but they saw banks’ reactions to open market operations as more unreliable than in the modern textbook account. They noted that, when the Fed bought securities, banks would sometimes use their extra cash not as the basis on which to expand their balance sheets, but as the means for repaying borrowings from the Fed. This would weaken the expansionary impact of security purchases. So member banks’ borrowing behaviour had to be given a role in the transmission mechanism. Like other Fed officials, they also shared some real bills prejudices. In Meltzer’s words, this led them to make the “easy, but invalid, inference” that the level of “member banks’ borrowing or a market interest rate” could be relied upon as “the proper measure of the thrust of monetary policy”.

According to the Riefler-Burgess framework, if banks had low borrowings from the Fed and were not trying to seek new finance, “the credit situation” was easy and there was no need for the Fed to do more. The conclusion could be drawn the more definitely if interest rates were at historic lows. As it happened, this was exactly the

Different money aggregates in the Great Depression

Collapse of broad money signifies its causal role

Chart shows a broad money measure (currency held by public plus all bank deposits) and a narrow money measure (currency held by the public only) at mid-years. Source is Milton Friedman and Anne Schwartz, *A Monetary History of the United States 1867 - 1960* (Princeton University Press, 1963), pp. 712 - 15.



As in modern Japan, different money aggregates had markedly divergent behaviour in the USA during the Great Depression. A broad money measure, including currency held by the public and all bank deposits (including time deposits) fell by roughly a third between 1929 and 1933, with the sharpest rates of contraction recorded in 1931 and early 1933. As wealth-holders would have been balancing time deposits against other assets (such as equities and bonds) in their portfolios, it is this broad money measure – which roughly corresponds to the modern M2 – that seems best to explain the macroeconomic facts of the Great Depression. It hardly makes sense to suggest a relationship between the public's currency holdings and the stock market collapse, as financial institutions and wealthy individuals would not have considered notes and coin a valid part of an investment portfolio. In fact, the public's currency holdings soared between 1930 and 1932, just as they have in Japan in recent years, partly because of the safe and predictable value of notes relative to the uncertainty of bank deposits.

situation in which the Fed found itself in the early 1930s. The reluctance to conduct open market purchases, of a scale appropriate to the severity of the downturn, therefore stemmed from the Riefler-Burgess ideas. Meltzer observes that the Fed's governors, having been persuaded by these ideas that they had to look only at money market variables as guides to policy, "believed that they had done all that could be done to prevent a collapse of the monetary system. They did not regard the declines in money and bank credit as consequences of their actions."

Meltzer prefers to focus on the monetary base and the quantity of money

Meltzer's analysis is sometimes quite difficult, with a complex interplay between the main text, many intriguing footnotes, and several well-chosen charts and tables. But he tells the story well, points his darts at the right targets and draws blood. Like Friedman and Schwartz, he is convinced both that policy is best measured by some amalgam of the monetary base and the quantity of money, and that the Great Depression could have been avoided if the Fed had understood the pivotal role of these aggregates in the economy's behaviour. At a time when central banks are said to be increasingly indifferent to money supply statistics, Meltzer's message is challenging and perhaps a surprise.

But - throughout the Great Depression - the banks had excess cash reserves

Yet it is possible to question some of Meltzer's conclusions, even while being sympathetic with his emphasis on money. Critical to any interpretation of the Fed's conduct in the early 1930s is the significance attached to a conspicuous feature of banks' balance sheets. To denounce the Fed because it did not inject enough cash into the American banking system surely presupposes that the system was short of cash. But that was not so. Throughout the Great Depression banks had higher cash reserves than necessary to meet the Fed's rules. Indeed, at most stages they had excess reserves in such abundance that contemporaries – including many of the Fed's officials – could see no purpose in further open market purchases. Such purchases would certainly add to their cash, but – if they were not expanding their earning assets in response to surplus cash at present – why should yet more surplus cash make any difference?

Surplus reserves were particularly large in late 1932, when bank balance sheets and the quantity of money were contracting

The most contentious period is late 1932. Despite all the brickbats thrown at the Fed by Meltzer, Friedman and others, it had in fact been making substantial open market purchases until the summer months. The banks continuously had excess reserves of \$300m., \$400m. or so in the middle of the year. In the autumn heavy gold inflows, notably from European countries worried by the rise of fascism, caused further increases in banks' cash balances at the Fed. They soared from \$2,041m. in June to \$2,582m. in January 1933, a rate of increase equivalent at an annualised rate to almost 50%. Out of the \$2,500m. - \$2,600m. reserve figure reached by year-end, \$700m. to \$800m. was in excess of requirements. However, banks did not expand their balance sheets. According to the data in Friedman and

Schwartz's *Monetary History*, banks' deposits were lower in January 1933 than in June 1932.

As the base and the quantity of money moved in opposite directions, would expansionary open market operations necessarily have worked?

Given these facts, it is understandable that members of the Fed board should have expressed scepticism that extra open market purchases would be beneficial. At a meeting of the directors of the New York reserve bank on 22nd December 1932 Harrison, its governor, noted that excess reserves had increased, and that this had not led to new credit or money creation. Repeatedly in the next few years Fed officials were to write memoranda about the futility of expansionary open market operations when the banks already had surplus cash. Indeed, a more general point has to be made. The monetary facts of the Great Depression do not agree with the notion that changes in the monetary base are closely correlated with changes in the quantity of money. On page 378 Meltzer reports that in the period from August 1929 to January 1933 the public's currency holdings increased by 23.2% and the monetary base as whole by 12.2%, whereas the M1 measure of money declined by 23.2%. According to Friedman and Schwartz, banks' deposits fell in the same period from \$41,390m. to \$29,175m. or by almost 30%.

Relevance of monetary base to monetary situation demonstrated dramatically by sequel to 1936-37 increases in banks' cash reserve requirements

Plainly, the monetary base and the quantity of money moved in opposite directions and the divergences in their rate of change were large. Given these patterns, it would be no surprise for knowledgeable observers to believe that a big chunk of banks' reserves was redundant for the time being, but might in future give the banks the firepower for rapid and potentially inflationary monetary expansion. Many contemporaries – including key members of the Fed's board – did draw these conclusions. When the economy recovered in 1934 and 1935, they argued that the Fed ought to restore its grip on the banking system by eliminating the excess reserves. Worried about potential future inflation, the Fed doubled reserve requirements in three stages between August 1936 and May 1937. With apologies to Lady Bracknell, the first rise was careless, the second rise was a misfortune and the third rise was a catastrophe. Bond yield rose sharply in the spring of 1937, the stock market crashed in the autumn, and demand, output and employment then collapsed until late 1938. The Fed had got it completely wrong.

The Great Depression had increased banks' equilibrium cash-to-assets ratio

The divergence between the changes in the monetary base and the quantity of money in the Great Depression had not been accidental or unimportant, and it did not mean that the banks were indifferent to the level of their cash reserves. The point was that the financial turbulence of the depression years, and in particular the realisation that a scared public might withdraw cash from basically sound institutions, had caused the banks to re-assess their equilibrium reserve ratios. In the mid-1930s they felt comfortable only with reserves well *above* the ratios imposed by the Fed for regulatory purposes. Banks' reserves might be excessive relative to the Fed's rules; they were not excessive relative to their own balance-sheet risks and

portfolio preferences. The doubling of reserve requirements led to shrinkage of bank assets and the quantity of money, and economic activity followed the quantity of money downwards.

Monetary base was important to banks' operations in the 1930s - but so also was banks' capital, of which they were desperately short

Meltzer, and Friedman and Schwartz, are right to condemn the raising of reserve requirements in 1936 and 1937, and the Fed's refusal to offset it by security purchases, as incompetence of a high order; they are also right that – ultimately – expansionary open market operations would have worked in 1931, 1932 and 1933. But they have missed a few links in the chain of argument and been less than candid about the scale of the operations necessary for the task. In those years banks were traumatised not just by runs on their deposits, but also by heavy loan losses and the erosion of capital. The shortage of capital imposed a constraint on asset growth, almost regardless of the cash reserve position. Open market purchases may have been necessary to prevent banks cutting their existing assets, but it does not follow that they would have been sufficient to make the banks take on new assets.

However, even with the US banking system paralysed in a "narrow liquidity trap", the Fed could have stimulated the economy by purchasing assets from non-banks

But all was not lost. Open market purchases would still have revitalized the economy because of a different and less efficient mechanism than the banking system multiplier. It is vital to remember that open market purchases could be from both banks *and non-banks*. Non-banks would have held the monies from the sales of securities to the Fed in two forms, either as extra cash (i.e., notes) or as increased deposit claims on the banks. *Both the cash and the deposits would have been money*. When the extra money took the form of deposits, the banks in turn may have allowed their resulting claims on the Fed (i.e., their cash reserves) to rise almost without limit as a proportion of their assets. The Fed could no longer expect the banks to boost their earning assets by a multiple of their extra cash because, bereft of capital, they were caught in a form of "liquidity trap". (The liquidity trap here is the "narrow liquidity trap" proposed in the March 2003 issue of Lombard Street Research's Monthly Economic Review, (2)). Nevertheless, the quantity of money would rise by as much as the non-banks' sales of securities to the Fed and, in that sense, monetary policy could still work. The Fed could rely on the monetary status of its note liabilities, almost as if the banking system did not exist. The money multiplier was no longer ten or twelve, as the textbooks said; it had fallen to one, but – crucially – it remained positive.

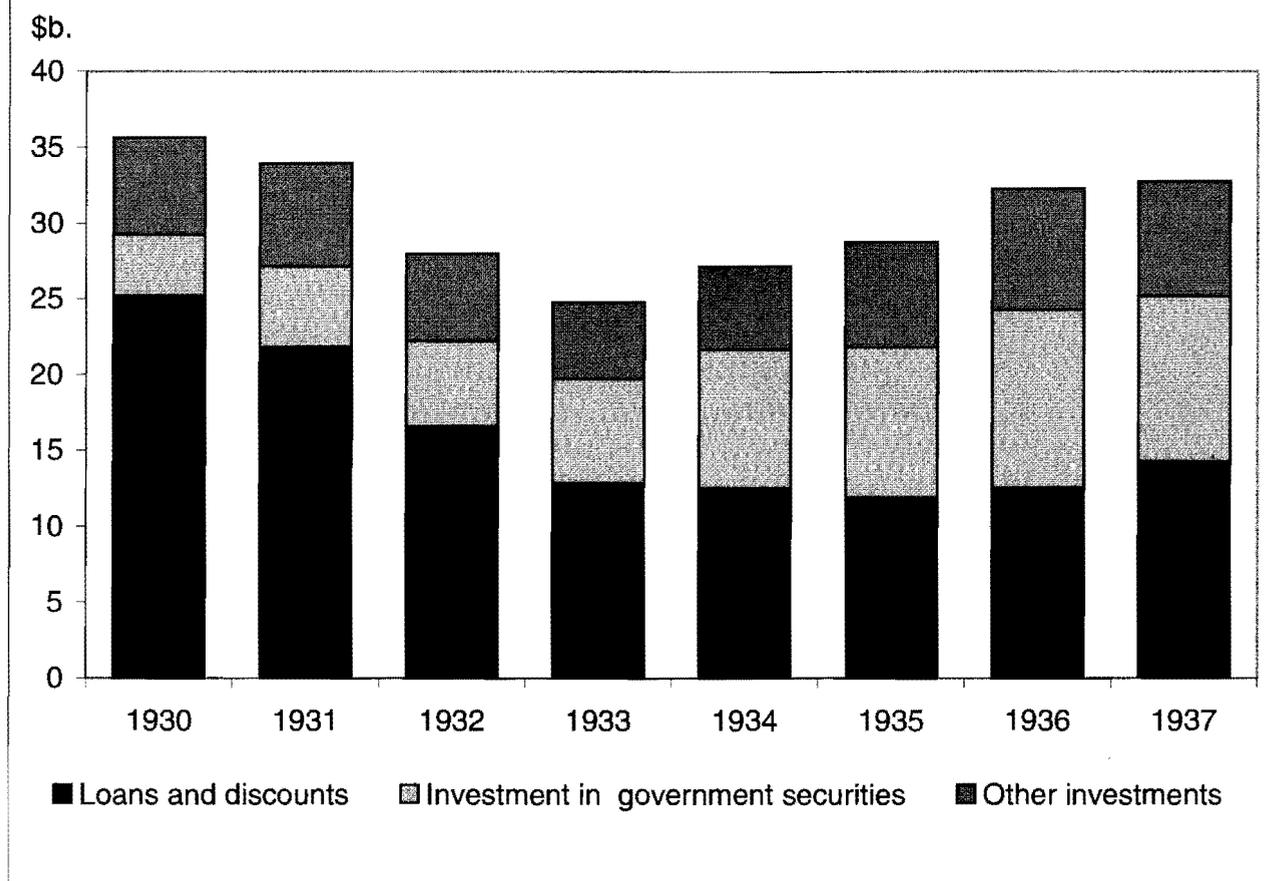
Keynes' remarkable comments in Chicago (!) on the Fed's problems in 1931

Meltzer makes many complimentary references to English writings on central banking. But he has overlooked what were almost certainly the most perceptive contemporary comments from a visiting Englishman. These came from none other than John Maynard Keynes. In the summer of 1931 he was in Chicago to give a series of lectures sponsored by the Harris Foundation. On 1st July he was the discussion leader for a round table on the theme, 'Is it possible for governments and

Why did bank deposits expand after 1933?

Banks' purchases of government securities responsible for money creation

Chart shows three main assets in portfolios of US banks which were members of the Federal Reserve System at mid-year. Source is Ray B. Westerfield Money, Credit and Banking (New York: Ronald Press Company, 1938), p.906.



The chart on p. 5 showed that in the USA a broad money measure collapsed by a third between 1929 and 1933, but then recovered all the loss (i.e., it rose by about 50%) between 1933 and 1937. The recovery in broad money was accompanied by buoyant asset prices and a powerful revival in demand, output and employment. This chart shows the main asset counterpart on banks' balance sheets to the increase in their deposit liabilities. Their holdings of government securities jumped from \$5.6b. in mid-1932 to \$10.9b. in mid-1937. It is striking that – as the chart shows – banks' "loans and discounts" (i.e., bank credit) were *lower* in 1937 than in 1932. The key message is that national income is related to the quantity of money, not bank credit by itself. If the quantity of money expands because banks purchase existing securities (i.e., there is now credit in the economy), the usual macroeconomic consequences of excess money emerge. The key points for today's debate on Japan are twofold, that the extension of new bank credit is *not* a precondition of recovery and that the government should concentrate debt issuance at the short end to make the paper attractive to the banking system.

central banks to do anything on purpose to remedy unemployment? As the subject of public works had been covered in an earlier round table, Keynes concentrated on “central bank action”. (3)

Keynes saw that - although the banks were in a narrow liquidity trap - the Fed could expand money by asset purchases from non-banks

Like Friedman and Schwartz in the 1960s, and Meltzer in his recent book, Keynes insisted that open market purchases were the right answer. He saw that the banks might “simply maintain larger balances than they require [i.e., they would have excess reserves]”. However, that was not the end of the matter. “[T]he Federal Reserve System would have to act” on an even “larger scale”. By buying securities from the banks, the Fed would add to their cash balances with it and, “If you inflate their balances, you are also inflating their deposits, even if they don’t multiply them by nine or ten. When the Federal Reserve System buys governments, it means the public has increased deposits, and they can’t afford to accumulate non-interest-bearing assets beyond a certain point.” Banks’ reluctance to expand their earning assets could therefore be overcome, although “the scale of operations may [have to] be rather uncomfortably large in order to produce consequences”. In short, because the money multiplier had dropped from ten to one, the Fed would have had to balloon its balance sheet to some fantastic figure in order to resuscitate the economy.

The problem was the potential scale of the purchases required, as the Fed’s balance sheet might have to balloon to a high ratio of GDP

Unfortunately, the Fed faced a constraint. It was a very special kind of bank, but it was still a bank. Not only did it have a balance sheet, it also had profits and losses. And – as with any other bank – the addition of vast quantities of government securities to its assets exposed its capital to loss. An important reason for the failure of the Fed to conduct the expansionary open market purchases in the early 1930s was that it had to worry about its own profitability. Because the money multiplier had fallen to one, there was a possibility that open market operations would have been effective only on a scale that imperilled the Fed’s own capital base. A key point here was that – if the Fed bought long-dated governments, boosted the quantity of money and stimulated demand – the possible later return of inflation would deliver heavy capital losses to the Fed’s bond portfolio. This fear was mentioned frequently in Federal Reserve internal papers at the time. Indeed, as Keynes noted in a memo to the UK’s Economic Advisory Council a few weeks after his Harris Foundation lecture, the Federal Reserve banks had suffered significant losses after they had “intervened with large purchases of ‘governments’” in 1927.

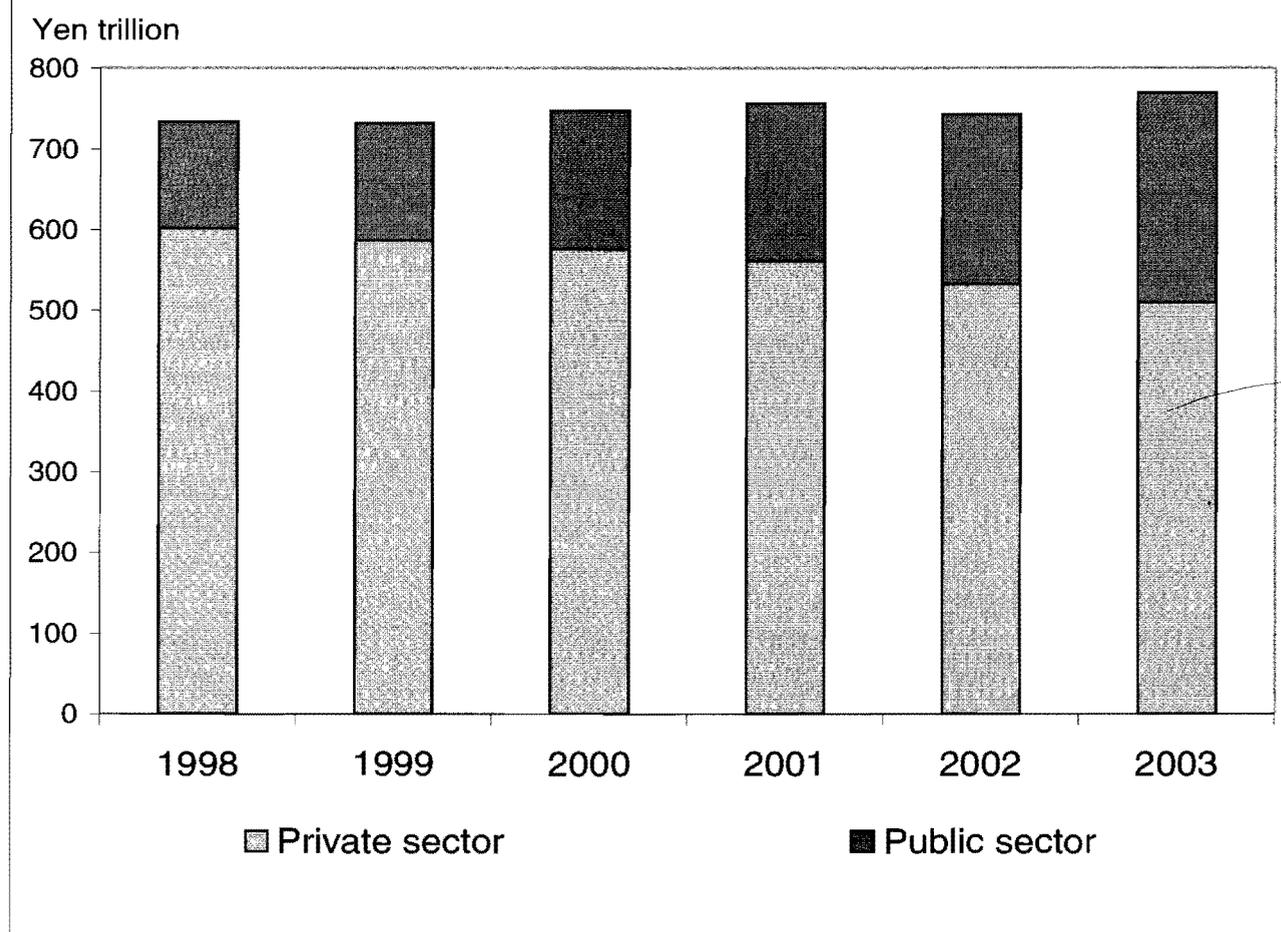
and the large balance sheet implied extra risk, so that the Fed might “go bust”

At this point Meltzer – and of course Friedman – might object that central bank profits and losses are of no macroeconomic significance. From a theoretical standpoint, they would certainly be right if a central bank were 100% owned by the state and if the central bank’s assets were exclusively government securities. The government and the central bank ought to put their heads together, and agree that accounting losses incurred by the central bank are ledger-book transfers between

In praise of “printing money”

Government borrowing from banks to the rescue, as in the USA in 1930s

Chart shows assets of Japanese banking system, as measured by “the monetary survey” in the Bank of Japan’s Financial and Economic Statistics, and in trillions of yen. A trillion yen equals \$9.5b. at the current exchange rate



The structure of Japanese banks’ assets in recent years has changed in much the same way as that of American banks’ in the 1930s. (See the chart on p. 9.) Claims on the private sector – predominantly in the form of loans – have contracted, while claims on the public sector, mostly government securities, have expanded strongly. Fortunately, the Japanese experience has been less extreme than the American. Whereas in the USA bank credit to the private sector halved in the four years to 1933, in Japan it fell by only a sixth in the five years to 2003. As Japanese banks’ claims on the government doubled, the quantity of money did not fall in Japan. Money growth was very slow, but it was consistent with virtual stagnation in domestic demand rather than the wrenching contraction seen in the USA. However, the upturn in US money from 1933 – which ran at 15% a year for three years – carries a lesson for Japan. If the Japanese authorities had expanded government borrowing from the banks more rapidly and more deliberately (as they did in the USA after the dollar’s devaluation against gold in 1934), their economy would have recovered sooner.

themselves without any relevance to private sector agents or economic activity. As it happens, the Fed was not owned by the American government in the 1930s and it still is not today, and awkward constitutional issues would have been raised if the Federal Reserve had gone bankrupt. Even if the central bank and the government ought to be consolidated in abstract economic theory, practically they were distinct.

Danger of over-expanded Fed balance sheet argued that the job of increasing the quantity of money needed to be transferred to the government

But that is not the most persuasive answer to the claim that, from a policy-making perspective, the central bank and the government ought to be seen as a single unit. The best reply is “yes, that may be correct in theoretical terms, but then why should the central bank be regarded as having exclusive responsibility for reviving the economy?”. If the government and the central bank can be conceived as operating jointly, why should the blame for the Great Depression fall exclusively on the Fed’s failure to conduct expansionary open market operations? The American government could have added directly to the quantity of money by two means. First, it could have seized the right to issue banknotes from the Fed or, at any rate, have passed legislation enabling it to issue notes alongside the Fed. It could then have printed without limit. Secondly, it could have borrowed on a large scale directly from the banks, giving them extra securities in return for a vast increase in its own deposit with them. The government’s deposit would not in the first instance have been part of the quantity of money, but – when it had spent the deposit – the deposits of private sector non-banks would have risen. This would have been extra money in the economy.

US government did threaten to seize the right to issue notes from the Fed

As it happens, these two methods of usurping the Fed’s monetary role played an important part in the debate about American policy-making in the 1930s. In early 1933, at the worst phase of the Depression, Senator Thomas of Oklahoma added an amendment to the Agricultural Adjustment Act giving the President the right to issue \$3,000m. of notes (i.e., “greenbacks” or uncollateralized legal tender issued by the government, not the central bank) if the Fed were not more expansionary. In April President Roosevelt supported the amendment. There is no doubt that the Thomas amendment terrified the Fed and gave the Roosevelt administration considerable bullying power in their dealings with its board members. (Happily, the greenbacks were never issued.)

But in practice its most important stimulatory action was to devalue the dollar and to buy vast amounts of gold

This bullying power was used partly to force the Fed to resume large-scale open market purchases. However, that was not the most significant measure of monetary expansion carried out at the behest of the US Treasury. Far more important were *government* operations, not *central bank* operations, made possible by the devaluation of the dollar against gold in 1934. The Federal Government purchased large amounts of gold and, in the process of paying for the gold, it added to the cash and deposits held by non-banks. This was – in effect – a massive stimulatory open market operation *by the government*; it had direct and fairly certain effects on the quantity of money.

The gold purchases were financed by sales of short-term debt, largely to the banks, with the result that the quantity of money rose rapidly between 1933 and 1936, and the US economy recovered strongly

Indeed, because the depressed conditions of the 1930s were accompanied by continuous budget deficits, the Treasury could exert huge influence over the Fed and the monetary policy by its decisions on public debt issuance and management. It had the good sense to finance the deficit predominantly at the short end, so that the banks were keen and willing to expand their assets by holding more government securities. (Banks generally regard long-dated government securities as an unattractive asset, because of their price volatility.) In fact, the events of 1933 to 1936 are a convincing demonstration of the immense power of government-initiated debt operations. The Federal Reserve's member banks had virtually the same "loans and discounts" (i.e., lending to the private sector) in mid-1936 (\$12.5b.) as at the worst phase of the crisis in mid-1933 (\$12.9b.), but their holdings of government securities had jumped from \$6.9b. to \$11.7b. Because of these extra assets, their deposits and the quantity of money increased. According to Friedman and Schwartz, commercial bank deposits climbed from \$25.1b. in June 1933 to \$38.1b. in June 1936, or by 51.8% (i.e., at an annual rate in the three years of 14.9%). Bond yields fell until early 1936, while in 1935 the stock market had its best year in the twentieth century. Demand, output and employment all rebounded strongly.

In Japan today banks have excess cash reserves, as in the USA in the early 1930s, and a debate is under way about the purpose of expansionary open market operations

What is the relevance of American monetary policy in the 1930s, and Meltzer's new insights into it, to Japanese monetary policy today? The parallels are so close as to be extraordinary. As in the USA then, so in Japan today the banks have vast cash holdings far in excess of legal requirements and economic experts debate the effectiveness of further *central bank* operations to stimulate the economy. Just as Fed board members under Harrison and Eccles worried that a large bond portfolio would expose their capital to loss, so officials at the Bank of Japan under Mieno and Hayami have expressed public anxiety about future losses on holdings of Japanese government bonds. While some observers in the USA in the early 1930s thought that a contraction of the financial system was a necessary moral purgative after the stock market excesses of 1928 and 1929, so the same sort of argument is heard now in Japan from misguided people who believe that a down-sizing of the banks is an essential part of a wider programme of financial rehabilitation.

Government debt management may sometimes be a better weapon to deal with a slump than central bank money market operations

Meltzer has written a wonderful book, and it needs to be read not just by monetary historians, but by everyone concerned with the making of central bank decisions in the modern world. But – like Friedman and Schwartz – he is not right that more open market purchases *by the central bank alone* are the only or even the main answer to a deflationary menace. Instead the priority must be expansionary asset purchases *by the government itself*. (Meltzer more or less gives the game away, accepting the potency of the government's monetary actions, when he concedes in his penultimate chapter that from 1942 to 1951 "debt management policy dominated monetary policy".) Officials at the Bank of Japan and the Ministry of Finance have much to learn from Meltzer's work, but the vital lesson is that – when banks already

have excess cash reserves and the central bank's balance sheet is so large that its solvency may be at risk – the initiative in monetary policy ought to pass to the government.

Notes

(1) In his review of Meltzer's book in *Central Banking*, volume XIII, number three, Professor Forrest Capie of Cass Business School notes that, whereas on average each year receives 21 pages, the Great Depression years receive 36 pages each. This is equivalent to, "approximately 17,000 words a year, almost a small monograph on each year of the depression".

(2) The narrow liquidity trap relates to the banking system's demand for monetary base assets. In a narrow liquidity trap, the banking system's demand for such assets is infinitely elastic at a zero interest rate, where "the interest rate" is the money market rate on which the central bank usually operates. So central bank operations to expand the base cause the ratio of the base assets to total assets in the commercial banking system to rise until, at least theoretically, they reach the maximum of 100% of assets. The narrow liquidity trap needs to be distinguished from the broad liquidity trap, which relates to non-banks' demand for the quantity of money, i.e., notes and coin held by the non-bank public plus bank deposits. In a broad liquidity trap non-banks' demand for money is infinitely elastic at a certain low "interest rate", where "the interest rate" is in fact a bond yield. Increases in the quantity of money cannot reduce the bond yield beneath this level and, in that sense, monetary policy is ineffective. Keynes' trap in *The General Theory* was the broad one. See the April 2003 issue of Lombard Street Research's *Monthly Economic Review* for further discussion.

(3) The Keynes' quotations are from Chapter 6, "An American visit" of volume XX of the Moggridge and Johnson (eds.) *Collected Works*.