Berkeley Economic History Laboratory

BEHL WORKING PAPER SERIES

WP2015-12

The Great Depression in a Modern Mirror

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November 2015

Berkeley Economic History Laboratory (BEHL)
University of California, Berkeley
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Berkeley, CA 94602
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BEHL Working Paper WP2015-12 | November 2015
http://behl.berkeley.edu/files/2015/12/WP2015-12_Eichengreen.pdf

The Great Depression in a Modern Mirror

Keywords: Great Depression, Great Recession, recovery, financial crisis
JEL classification: N00, N20

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The Great Depression in a Modern Mirror[1]

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October 2015

Jan Tinbergen is best known for applying mathematic tools to business cycle analysis and building the first statistical models of the economy. People here will know that he also had a deep commitment to public policy, shaped by having lived through the Great Depression. He co-authored with Hein Vos the Labour Plan (*Plan van de Arbeid*), which proposed debt-financed public investment as a vehicle for creating employment already in 1935. He proposed a scheme for government-sponsored unemployment insurance, also in the 1930s. He wrote of his transition from physics to economics,

> "I felt the existing inequalities among people as an injustice but was told it to be something that could not be removed without a better knowledge of the structure of society… The Great Depression, some years after, reinforced my conviction that economic research might be more useful than physical research."[2]

Eight decades later, memories of the Great Depression continue to shape the outlook and agenda of economists. In particular, they powerfully shaped the policy response to the financial crisis and Great Recession of 2008-9. As I argue in my book *Hall of Mirrors,* that response was shaped, specifically, by historical lessons about the *mistakes* of 1930s policy makers.

That this earlier economic crisis was the result of disastrous but avoidable policy mistakes became conventional wisdom, courtesy of influential tomes like Milton Friedman and Anna Schwartz's *Monetary History of the United States*, arguably the single most influential book in economic history written in the 20th century. So, in 2008, heeding the lessons of that earlier episode, policy makers vowed to do better. If the failure of their predecessors to provide emergency liquidity had spawned a cataclysmic banking and financial crisis, then this time they would flood the markets with liquidity and provide emergency assistance to the banks. If the failure of earlier policy makers to stabilize money supplies had produced a disastrous deflation, then this time central banks would cut interest rates and expand their balance sheets. If efforts to balance budgets had worsened the earlier slump, then this time governments would apply fiscal stimulus.

We can debate the adequacy of these measures, which certainly fell short of the ideal. We can reflect on why we failed to do better. But there is no doubt that the lessons distilled from scholarship on the 1930s were one reason we avoided another Great Depression.

In this lecture I want to ask the reciprocal question, *not* how scholarship on the Great Depression informed the policy response to the Great Recession, but rather how the experience of the Great Recession will inform scholarship on the Great Depression. "Every generation writes its own history of the past," the historian H.M. Stephens of the University of California, Berkeley observed in his presidential address to the American Historical

[1] The Tinbergen Lecture, Amsterdam, November 2015. This lecture draws on my 2015 book *Hall of Mirrors*, but attempts to frame the issues raised there in a somewhat different way, as will hopefully become evident.
[2] From Tinbergen (1970).

Association in 1916. In this spirit, I will ask how the current generation is likely to rewrite the history of the 1920s and 1930s given the crisis through which we just lived.[3]

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A first controversy arising out of the global financial crisis concerns the effectiveness of fiscal policy, or stimulus versus austerity, as it is also known. Keynesian models pointed to the possibility that fiscal stimulus could have especially large effects in depressed conditions, when there was little danger of crowding out other forms of spending by increases in interest rates. In contrast, the new-classical revival highlighted the possibility that much or even the entire increase in public spending would be neutralized by reductions in private spending by households anticipating the need for higher future taxes to service additional debt.[4]

All this was hotly debated before the crisis. There were analyses suggesting that increases in public spending did less to boost demand in heavily indebted economies, where they were likely to raise questions about the solvency of the government and the path of interest rates.[5] There were suggestions that reductions in public spending could actually be expansionary when taxes were high and debt burdens were heavy.[6] There were doubts that government was competent to allocate resources in ways that boosted demand as opposed to simply wasting resources.

These revisionist views found little support from the crisis. Blanchard and Leigh (2013) found that the fiscal multiplier was unusually large after 2008 – as large as 1.4, considerably above the levels assumed by the International Monetary Fund in earlier analyses and consistent with the view that fiscal policy is especially powerful in depressed conditions characterized by a liquidity trap. A flurry of studies informed by post-2009 experience, on which the data spoke clearly, rejected the view that there was such a thing as expansionary fiscal consolidation, especially under depressed crisis-like circumstances.[7]

So how will this change what we think about the 1930s? The traditional argument about the Thirties, following E. Cary Brown (1956), is that fiscal policy had the capacity to work but wasn't tried. Subsequent scholars inspired by the new-classical revival then questioned the effectiveness of fiscal policy in the recovery and argued that the explanation for the double-dip recession in 1937-8 was not that government spending declined but, rather, that tax distortions and regulation were increased (Cooley and Ohanian 2010). Experience since 2009 would appear to support Brown's original argument about the 1930s and not this revisionism.

This is the implication of recent historical research as well. The first post-crisis studies analysing the impact of deficit spending in the 1930s using annual data for a cross section of countries found large multipliers. Almunia, Benetrix, Eichengreen, O'Rourke and Rua (2011) follow modern studies by focusing on defense spending, variations in which are

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[3] I am aware that a disproportionate share of the scholarship I cite below is concerned with the United States. This may reflect the state of the literature or the biases of the author, depending on one's view.

[4] There was, in some circles, a regrettable tendency to neglect the distinction between a temporary increase in public spending, which would be only partially offset, since the resulting taxes would be spread over time, and a permanent increase in public spending, which would be fully offset in an economy where "Ricardian Equivalence" holds.

[5] See Auerbach and Gorodnichenko (2011) and Bi, Shen and Yang (2014).

[6] See the arguments and evidence in Alesina, Perotti and Tavares (1998).

[7] See for example Guajardo, Leigh and Pescatori (2014). While there seemed to be agreement that the benefits of fiscal stimulus and the costs of consolidation both were smallest where debt burdens were high, there was no agreement about the threshold level where the effects begin to diminish or on how rapidly the net impact on spending then tends to fall.

likely to be exogenous to the current state of the economy, obtaining multipliers on the order of 2. Unfortunately, much of the variation in military spending in the 1930s was driven by the experience of three countries, Japan, Germany and Italy, where other government interventions in the economy were extensive.[8] It is not clear, in other words, whether the large output effects reflect government spending or those other interventions.

A cleaner experiment is the 1936 World War I Veteran's Bonus in the United States, studied by Hausman (2014). The attractions of the episode include the fact that the bonus was largely exogenous to the current state of the economy, that it was not accompanied by government interventions as extensive as those in Japan, Italy and Germany, and that it can be studied at the level of individual states and households. Hausman too finds evidence of large multipliers, on the order of 1.5.

Another strand of work, starting with Eggertsson (2008), points to the role of fiscal policy as a signal of policy commitment. Eggertsson argued that the small budget deficits of the first Roosevelt Administration had large output effects because they credibly signalled that the future would differ from the past. The Roosevelt Administration's deficits signalled the advent of a new policy regime. They indicated that FDR was prepared to "do whatever it took," to paraphrase Mario Draghi, to end deflation.[9] This signalling interpretation of 1930s fiscal experience gained adherents subsequently, when the Japanese government's decision to raise taxes in 2014 seemingly defeated the Bank of Japan's efforts to end deflation, and then when the decision to postpone further VAT increases appeared to revive the Japanese economy.

Others (Eichengreen 2015) have questioned this story on the grounds that Roosevelt actually sent mixed signals about the deficit and was in fact committed to balancing the budget as quickly as possible. FDR failed to keep public spending high, weakening the credibility of his commitment to the new regime and confidence in the economy.[10] A better example of the signalling model was Korekiyo Takahashi's Japan, where substantial budget deficits were coupled with an expansionary monetary policy and the resulting output effects were large.[11] Recent research by Shibamoto and Shizume (2014) is consistent with this signalling interpretation of Takahashi's policies.[12]

The consensus of recent studies, then, is that the output effects of fiscal policy were large in the 1930s, when economic conditions were depressed and there was little monetary offset, but – as Brown emphasized half a century ago – policy makers were reluctant to employ the instrument consistently and aggressively.[13] Subsequent revisionism attempting to

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[8] And where other unsavory aspects of the political regime have caused any strictly macroeconomic benefits of its policies to be underplayed.

[9] A related interpretation, from a different theoretical perspective, is Perry and Vernengo (2013).

[10] This is something that Reinhart and Reinhart (2009) suggest was also a problem also in a variety of other, mostly developing, countries that resorted to an activist fiscal policy.

[11] So I have argued in Eichengreen (2015).

[12] So too is the earlier work of Cha (2003).

[13] The British case is something of a challenge to this conclusion. Crafts and Mills (2013) base their estimates on newly constructed quarterly expenditure data for the 1920s and 1930s and obtain a fiscal multiplier of only 0.3-0.9. They argue that a small value is plausible since the British government was heavily indebted (the debt/GDP ratio never falling below 140 percent) and since studies of the recent period suggest that the output effects of spending are less in heavily indebted economies. Middleton (2010) similarly suggests that a larger program of public spending would have mainly raised interest rates, not output and employment, given these unfavorable financial circumstances. I am not convinced. The failure of interest rates in the UK to rise post-2010 (after Middleton wrote) casts doubt on this presumption. One wonders whether the small point estimates obtained by Crafts and Mills in fact reflect the lack of variation in the time series for this one country and

overturn Brown's conclusions thus looks less convincing in light of recent experience and analysis.

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The case for fiscal policy in a slump reflected the worry that, with interest rates approaching zero and central banks unable to reduce them further, monetary policy had lost its potency. As Keynes put it in *The General Theory*,

> "…after the rate of interest has fallen to a certain level, liquidity-preference may become virtually absolute in the sense that almost everyone prefers cash to holding a debt which yields so low a rate of interest. In this event the monetary authority would have lost effective control over the rate of interest."[14]

Central banks challenged this presumption starting in 2008. They expanded their balance sheets through security purchase programs and used forward guidance in an effort to steer the economy despite the fact that interest rates could not fall further.[15] These policies were controversial politically, since central banks were entering uncharted terrain. They were controversial economically insofar as rapid balance sheet expansion was seen as presaging runaway inflation.

But mostly it was the effectiveness of these policies, or their lack thereof, that was controversial. Critics questioned whether, with interest rates already low, central banks could significantly influence the portfolio decisions of investors. They questioned whether forward guidance had the capacity to push up expected inflation, and thereby push down real interest rates, in a depressed, fundamentally deflationary environment. My own reading of the available studies is that they point strongly to the conclusion that these policies helped – that they succeeded in raising inflation expectations, or at least in fending off outright deflation – where they were pursued sufficiently aggressively.[16]

This recent debate naturally raises the question of whether expansionary monetary policies would have been effective in the 1930s, contra Keynes, had they been pursued more aggressively. It highlights the question of whether, in those few instances where significant monetary initiatives were pursued by 1930s policy makers, the effects were significant.

In fact the postulate of monetary-policy ineffectiveness, advanced by Keynes in his liquidity-trap critique, had already been challenged and the importance of the expectations channel had already been argued for the U.S. by Temin and Wigmore (1990). Temin and Wigmore suggested that Roosevelt's "bombshell message" abandoning the gold standard signalled a fundamental change in monetary regime. Specifically, FDR's rhetoric created expectations that the future would bring inflation rather than deflation. Temin and Wigmore showed further that both real and financial variables responded quickly and positively to the regime change. Evidently, this was forward guidance of the most effective possible sort.

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consequent difficulty of identifying an effect. In fact, there is a long history of counterfactual studies of fiscal stimulus in 1930s Britain, reflecting prominent proposals for the same, notably associated with Keynes, starting in 1929. Thomas (1981) was perhaps first to apply time-series methods to annual data, obtaining a long-run multiplier of 1.4. Another Thomas (Mark Thomas 1983) used an input-output/social expenditure framework to obtain a multiplier of 1.6. Dimsdale and Horsewood (1995) estimated a multi-equation model with slowly adjusting wages and prices, obtaining an even higher long-run multiplier (as high as 2.5).

[14] Keynes (1936), Chapter 15, p.187.

[15] Five-plus years later, some central banks did lower the rates of bank reserves below zero, although these efforts were constrained in that banks and their depositors had the alternative of holding cash.

[16] I am relying on the evidence from studies like Gagnon, Raskin, Remache and Sack (2010) and Krithnamurthy and Vissing-Jorgensen (2011).

Did unconventional monetary policies in the 1930s also have significant effects operating through portfolio-balance channels, the other way that unconventional monetary policy is thought to have worked starting in 2009? Focusing on the U.S., Hanes (2013) found a positive impact on the price of risk assets in the U.S. A related literature on the U.K. similarly finds significant effects on property prices and equity markets.[17] Thus, research on the 1930s, viewed through the lens of the recent crisis, suggests that monetary policy affected the economy via both the expectations and portfolio-balance channels. All this is incompatible with the "strict constructionist" view of the liquidity trap. When it came to monetary policy, in other words, FDR was right, while Keynes was wrong.

If this conclusion is so obvious, then why did it take the 2008-9 crisis to bring it to light? The answer, I think, is the effectiveness of forward guidance and portfolio-balance effects in the 1930s was overlooked because the monetary initiatives of the 1930s were tentative, making it easy to miss the evidence. Central bankers were reluctant to capitalize on their newfound freedom. Aside from the cases of Japan and, arguably, the U.S., they hesitated to undertake aggressive balance sheet expansion. In Eichengreen (2015) I document their reluctance to do so even in the UK and Sweden, countries supposedly renowned for their policies of cheap money and price-level targeting. Reinhart and Reinhart (2009) show that monetary policies were equally tentative in a number of emerging markets.

Why were central bankers in the 1930s so lacking in ambition? Insights from post-2008 experience suggest several answers. The Fed's transcripts starting in 2008 show that the FOMC was preoccupied by inflation, rendering it reluctant to do more, even when the clear and present danger was deflation; this inflation phobia reflected the impact of high inflation in the 1970s on the preoccupations of U.S. central bankers.[18] The European Central Bank sterilized its 2007 liquidity injections and raised interest rates twice in 2011, similarly reflecting the mistaken fear, informed by 1980s and 1990s history, that inflation was the immediate danger.

The situation in the 1930s was similar. In countries that had experienced high inflation in the first half of the 1920s, there was fear that balance-sheet expansion again augured inflation and inability to recognize that the deflationary 1930s were different. Officials hesitated to allow the currency to depreciate significantly for fear that this would once more ignite a destabilizing inflation-depreciation spiral. There was reluctance to embrace monetary activism in the absence of a nominal anchor once the earlier anchor, the exchange rate, had been cut loose. There were concerns about moral hazard and about fuelling another asset bubble like the one that burst so catastrophically in 1929. And there were strongly held monetary dogmas, appropriate for normal circumstances but not for an extended slump (for example the Reifler-Burgess doctrine that pointed to the level of interest rates as a way of gauging whether money was loose or tight) which misleadingly counselled inaction.

Thus, Cary Brown's conclusion about fiscal policy in the 1930s is equally applicable to monetary policy: it's not that it didn't work but that it wasn't tried. And it wasn't tried because the views of policy makers, and of the politicians to whom they were accountable, were so powerfully shaped by history as opposed to current conditions.

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[17] See Broadberry (1987), whose evidence and analysis are reviewed by Crafts (2013).
[18] See for example the transcript of the FOMC meeting of August 5, 2008; Board of Governors of the Federal Reserve System (2014), p.67.

These references to currency depreciation bring us, inevitably, to the controversy over currency wars. Policy makers in emerging markets complained in 2012-3 that advanced countries undertaking quantitative easing and attempting to reflate by pushing down their exchange rates were exporting their deflation to the emerging world. In 2014-5, after growth and inflation in emerging markets slowed, the complaint became that the U.S., the Eurozone, Japan and now emerging markets as well were all attempting to combat the slowdown by pushing down their exchange rates, exporting deflation to one another.[19] Now that interest rates had fallen still further, neutralizing the portfolio-balance channel of quantitative easing, only the expectations channel remained. And the only durable way of affecting expectations, experience had shown, was by manipulating the exchange rate.

The problem was that not all countries could push down their exchange rates at the same time, rendering monetary activism a zero-sum game. Some argued that it was, even worse, a negative sum game insofar as these counterproductive and ultimately futile efforts to depreciate currencies against one another gave rise to uncertainty that depressed investment.

My assessment was different. It was that if this was currency war, then we needed more of it (Eichengreen 2013a, b). Against a deflationary global backdrop, reflationary policies were needed in all countries. There might be no change in exchange rates if all central banks moved in the same direction, but systematic analysis of monetary initiatives undertaken since 2007 did not support the conclusion that such policies could now work only through expectations channels or that expectations could be affected only through currency depreciation. And insofar as uncertainty created by haphazard policy initiatives was an issue, this could be addressed through better communication and international policy coordination.

Those who adopted the currency-wars meme regularly invoked the experience of the 1930s.[20] Ragnar Nurkse (1944), in his influential analysis of that era, famously argued that currency depreciation in the 1930s had been beggar thy neighbour and that the uncoordinated way currencies were managed had created uncertainty that further depressed investment. Critics of recent exchange rate policies were simply echoing his concerns.

It is important to recall, therefore, that subsequent research on the 1930s had qualified Nurkse's conclusions significantly. To be sure, that research confirmed that currency devaluation was beggar thy neighbour in the 1930s insofar as it was not accompanied by significant domestic credit expansion.[21] Moreover, it had created uncertainty, depressing consumer and investor confidence, where it was poorly coordinated. But the disruptive effects of such uncertainty are prone to exaggeration, as argued by Ahamed (2009). There were significant instances of uncertainty-reducing coordination, like the formation of the Sterling Area and the Tripartite Agreement of 1936. There were instances of domestic credit

[19] See the summary of market opinion in Kennedy (2015).

[20] Reinhart and Reinhart (2009) considered a large sample of countries that depreciated their currencies in the 1930s and concluded that the measure had only weak effects. The U.S. was unique in experiencing positive effects, they concluded, because it alone could engineer a significant depreciation of the exchange rate. FDR having acquired the option of pushing the dollar down more under the provisions of the Gold Reserve Act of 1934, foreign central banks and governments knew that aggressive action to depreciate their currencies might provoke retaliation by the United States. So they were reluctant to utilize this policy more aggressively.

[21] The main way domestic credit increased in countries fortunate enough to experience increases in the 1930s was through balance of payments surpluses and capital inflows, not domestic central bank initiative, as shown by Eichengreen and Sachs (1985) for a cross section of European countries. The point applies also to the post-1934 United States, as developed by Romer (1992) and Irwin (2013), whereas the powerful expectations effects, a la Temin and Wigmore, were centered on the April-December 1933 period. This means that even countries that were able to successfully pursue the policy, like the United States, did so at the expense of their neighbors.

expansion sufficient to activate both the portfolio-balance and expectations channels, like Japan starting in 1932.

Depreciation translates into currency wars, in which winners gain only at the expense of losers, when these conditions are not met. And it is indeed unfortunate that they were rarely met in the 1930s. But the constructive response is not to reject activist monetary and exchange rate policy as beggar thy neighbour. Rather it is to develop more effective institutions of international coordination to limit uncertainty and prevent damage to confidence, as central banks sought to do after 2007. It is to use those monetary instruments sufficiently aggressively that they are capable of producing results, as the Fed finally did with QE3, as the Bank of Japan did with the appointment of Governor Kuroda, and as the ECB has shown signs of doing since the beginning of this year.[22] This recent experience suggests that the problem in the 1930s was not beggar-thy-neighbor currency wars but the failure of central banks to act more aggressively and coordinate their policies more effectively.

In this case, the 2007-8 crisis and central bank response support recent scholarship, which sees the collapse of the 1930s gold standard as part of the solution, not of the problem, rejecting the traditional Nurkse-esque interpretation.

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The other set of international monetary parallels pointed up by our recent crisis are those between the euro and the gold standard. There now is recognition that the euro shares many of the weaknesses of the interwar gold standard.[23] Adjustment is difficult because of constraints on adjusting the exchange rate. That burden is even heavier in the absence of fiscal insurance of the sort that exists within national systems of fiscal federalism. Market pressure for governments to eliminate balance-of-payments and fiscal deficits can be intense, but there is no analogous pressure on countries with surpluses. The illusion of exchange rate stability can set on foot very large capital flows that are prone to reverse on a dime (or a euro). Because the national central bank lacks the autonomy to backstop the market in sovereign debt, it can be difficult for the government to substitute a countercyclical fiscal policy for the missing monetary instrument.

How will the euro crisis change how we think about the weaknesses of the interwar gold standard? It won't change the basic narrative, but it is likely to change the nuance. Recent experience highlights even more starkly than before how the collapse of international trade and lending, which were underway already in 1931, affected the calculus of countries deciding how far to go, and what costs to shoulder, when defending their gold standard parities. Today, the members of the Eurozone still have Europe's single market with its dense web of commercial and financial relations to preserve, something that the collapse of their currency area could fatally undermine. Not so in 1931, when trade had *already* collapsed. The fact that there was no longer a dense web of international trade to preserve rendered governments more willing to abandon their trade-friendly gold-standard system. It followed that the gold standard in the interwar years was quicker to collapse than the euro system more recently.

[22] This being the emphasis of Eichengreen (1992).
[23] Why that recognition was so belated, allowing European officials to go ahead with their risky project, is itself an interesting and important question. It may be that important differences between the two contexts, as described below, rendered the analogy less compelling. On this see also O'Rourke and Taylor (2013). Crafts (2013) is another thoughtful treatment.

In addition, recent experience underscores the role of political conflict in the collapse of the interwar system. There is no absence of political tension in the euro crisis, most obviously between Greece and its Eurozone partners, but also more generally. That said, there is nothing approaching the level of distrust between France and Germany in 1931, when memories of World War I were just 12 years old (not 70). Nor were there effective transnational institutions like the European Commission and the Eurogroup to provide a venue for airing and resolving disputes. In 1931 France demanded that Germany stop rearming, halt the construction of pocket battleships, abandon its customs union with Austria and meet its reparations obligations in full. There may be parallels in the "trust problem" between Berlin and Athens in 2015, and with German insistence that Greece should meet its debt obligations in full and pursue structural reforms, but the extent of those tensions and, consequently, Berlin's conditions are slight compared to those laid down by Paris in 1931.[24]

Related to this is the observation that emergency loans to the crisis countries of Central Europe in 1931 were small compared to intra-European support for troubled Eurozone members.[25] Less trust meant less emergency assistance. One can argue that inter-European financial support should have been even more extensive starting in 2010. Still, the contrast highlights how the absence of an international lender of last resort, as emphasized by Kindleberger (1973), was a key factor in the collapse of the gold standard starting in 1931.[26] Recent experience, when political solidarity and transnational institutions so importantly supported the survival of the euro system, makes one wonder how the interwar gold standard survived as long as it did. Future research is certain to explore further these political aspects of the interwar financial crisis and the role that politics played in the gold standard's collapse.

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Bank failures and rescues, from Bear Stearns and Lehman Brothers in the U.S. to Northern Rock in the UK and Dexia and Fortis in this part of the world, were among the most dramatic aspects of the 2008-9 crisis. Bank failures were also prominent in the Great Depression.[27] But 21st century scholars, now having first-hand experience with bank failures, are likely to write the 1930s history of bank failures somewhat differently.

Three examples illustrate the point. My first example is motivated by the contrasting treatment of Bear Stearns and Lehman Brothers. Whereas Bear, when driven to the wall in March 2008, was rescued, Lehman, which experienced its death throes six months later, was not. Lehman was allowed to fail because it was insolvent – because its managers had made bad bets. It was allowed to fail because there were doubts about whether the Fed and Treasury had the legal authority to resolve it.[28] But it was also allowed to fail because policy makers wanted to make a statement. Having bailed out Bear Stearns, they were anxious to signal that not everyone would be rescued. And they wanted to shield themselves from criticism that they were too quick to bail out troubled banks.

Having now lived through this experience, future historians will better appreciate that the banking crises of the 1930s reflected not just the fact that central banks and governments failed to understand their responsibilities as lenders of last resort – Friedman and Schwartz's

[24] I describe Europe's trust problem in Eichengreen (2012).
[25] The comparison is rigorously made in Accominotti and Eichengreen (2015).
[26] In this context, Kindleberger pointed also to the failure of the United States to maintain an open market and, as consumer of last resort, to purchase the goods of other distressed countries. One is reminded of criticism of Germany after 2010 for failing to use its fiscal space and boost its demand for the exports of the crisis countries.
[27] As documented by inter alia Bernanke and James (1991).
[28] This is the explanation emphasized by Bernanke (2015). But it is not incompatible with the supplementary explanations I develop below.

interpretation – but also, as with Lehman Brothers, their sensitivity to political criticism. The banking crisis of 1933 resulted from the failure of the Reconstruction Finance Corporation to rescue Henry Ford's Guardian Group of banks, unleashing a panic that engulfed first Michigan and then entire country. In fact that decision reflected the criticism to which U.S. officials, from President Herbert Hoover on down, had been subjected for rescuing Central Republic Trust, the bank of former Vice President Charles Dawes, six months earlier. We are reminded that this instinctual desire to "teach them a lesson" by playing financial hardball is deeply ingrained, especially when doing so is a way for officials to rescue their reputations.

A second example concerns the form of the official assistance extended to distressed financial institutions. In September 2008, the Paulson Treasury's intention was to provide liquidity assistance, using the Troubled Asset Relief Program, or TARP, to purchase securities from the banks at market prices, given that the secondary market was temporarily frozen. A few weeks later, officials concluded that using the TARP instead for capital injections would be more effective.

This controversy directs attention to the efficacy of the different ways the official sector aided the banks in the 1930s. Bordo and Landon-Lane (2010), following Friedman and Schwartz, argue that the four great banking panics in the United States were liquidity, not solvency, crises.[29] It follows that a Federal Reserve that stabilized the money supply and provided emergency liquidity assistance could have staved off financial instability.

Recent experience when capital injections proved more effective than security purchases and liquidity provision suggests that the traditional Friedman-and-Schwartz-Bordo-and-Landon-Lane emphasis on liquidity in the 1930s may be too simple. This is the conclusion of Calomiris, Mason, Weidenmier and Bobroff (2012). They study Federal Reserve member banks (federal and state chartered alike) in the State of Michigan, the Michigan banking crisis of 1932-3 being a major event in the Great Depression, as already noted. They find that Reconstruction Finance Corporation loans to these banks had no statistically significant effect on failure rates, consistent with the idea that debt assistance simply increased the indebtedness of financial institutions and, by subordinating depositors, rendered confidence at the retail level even more fragile. In contrast, purchases of preferred shares – capital injections that did not increase indebtedness or subordinate depositors – significantly raised the odds of bank survival.[30] These results, informed in part by post-2007 experience, suggest that the bank distress of the 1930s reflected more than simply liquidity problems and that more far-reaching interventions were needed to repair it.

A final issue raised by the recent banking crisis is the course and consequences of post-crisis financial reform. Financial reform following the Great Recession was weak soup by the standards of the 1930s. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 in the U.S., the Vickers Rule in the U.K. and the measures informed by the Liikanen Report in Europe were all lacking in ambition by the standards of the Glass-Steagall Act of 1933 separating commercial from investment banking, the adoption of deposit insurance, Regulation Q ceilings on competition for deposits and creation of the Securities and Exchange Commission to oversee the operation of stock and bond markets.

[29] They base their analysis on aggregate time-series data, including recently constructed indices of the incidence of bank failures due to illiquidity and insolvency, based on reports of contemporary bank examiners, drawn from Richardson (2007).

[30] The authors also find that surviving banks receiving RFC assistance increased their lending relative to other banks as U.S. recovery from the Great Depression proceeded.

The explanation for this lack of ambition is the simple fact that, informed by the lessons of the Great Depression, policy prevented the worst. It prevented a complete financial meltdown and collapse like occurred in the United States in the 1930s. Distress in the 1930s was sufficiently widespread that commercial banks voluntarily abandoned their investment banking businesses. The prevailing regime was discredited. The bank lobby was unable to regroup. The result was much more rigorous regulation. The resulting reforms bequeathed more than a quarter century of financial stability after World War II, before memories of the 1930s faded and deregulation gathered momentum, setting the stage for major financial problems.

My view of this experience, I should acknowledge, is not universally held. Calomiris (2010), his views also clearly shaped by experience with post-Great Recession reform, argues that post-Great Depression reform was designed to preserve the prevailing, deeply flawed system, not to replace it. Regulation continued to prohibit cross-state branching by banks, preserving an unstable unit banking system. Protections for unit banks were favored by unit bankers themselves, by farm interests worried that their savings would be siphoned off into urban uses, and by populists, all of whom gained additional voice in the 1930s. The separation of commercial from investment banking prevented deposits from being used for securities lending, reflecting the continued influence of advocates of the real bills doctrine – that bank funds should be used only to advance the legitimate needs of business – a set of beliefs that caused more trouble than good. Regulation Q reduced competition in financial services, aiding weaker competitors and the recipients of rents who were the measure's natural advocates.

Thus, evaluation of 1930s financial reform remains contested, even more than before. This is not surprising, since precisely the same is true of post-2009 reform. Given the controversy over the adequacy of current financial reforms, we are sure to see more research on the adequacy of and motivations for financial reform in the 1930s.

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Another controversial aspect of the Great Recession is the role of household debt. One set of questions concerns the reasons for the sharp increase in mortgage and consumer debt in the run-up to the crisis. Some point fingers at the financial services industry for lowering lending standards and foisting on unsuspecting households financial instruments implying unexpectedly heavy payments (mortgage and credit-card loans that reset at higher levels after the advertised grace period). Others implicate the Clinton and Bush Administrations for embracing the "affordable housing goals" advanced by the government-sponsored entities Freddie Mac and Fannie Mae. Still others, noting that the increase in household debt was not all mortgage related, suggest that the roots of the problem lay in the growth of inequality, the stagnation of real wages and the erosion of working-class living standards, which households sought to defer by increasing their borrowing.

There was a somewhat smaller but still significant increase in household indebtedness, notably in the United States, in the 1920s. A smattering of pre-crisis research pointed to financial innovation and the endogenous response of the financial services industry as factors in this development (Eichengreen and Mitchener 2003). Future work, inspired by early 21st century experience, will undoubtedly analyze this 1920s experience in more detail.

A second set of questions concerns the effects once the economy and housing markets turned down. One factor in the weakness of consumer spending and slow pace of recovery in many countries was the effort of now-desperate households to "deleverage," that is, to work down their debt-to-income ratios before their creditworthiness was threatened. Comparing

U.S. states, counties and zip codes, Mian and Sufi (2014) show that pre-crisis levels of indebtedness are powerful predictors of subsequent declines in spending, auto sales and home prices.

The household balance sheet has long constituted a subsidiary theme in the literature on the Great Depression. Mishkin (1978) studied it with an eye toward explaining the sharp decline of spending in the U.S. starting in 1929. His account emphasized the accumulation of household debt in the 1920s and then the effect of the stock market crash and deflation in reducing the value of assets relative to liabilities. More recently, Gartner (2013) built on the recent work of Mian and Sufi, using a newly constructed state-level data set to show that states with higher initial debt-to-income ratios in the 1920s recovered more slowly in the 1930s. This shift in focus from the debts of banks and governments to the debts of households flows directly from the experience of the Great Recession. It is welcome. We can expect more research along these lines for the U.S. and other countries.[31]

A third question is what more policy makers could have done about this indebtedness problem. While big banks were bailed out as part of the policy response to the crisis, homeowners with mortgage obligations that now exceeded the value of their homes did not receive commensurate support. To be sure, there were government programs, in the U.S. the Home Affordable Modification Program (HAMP) and Home Affordable Refinance Program (HARP), among others. Nevertheless, there was still the feeling that government could have done more.

U.S. commentators were quick to draw comparisons between the HAMP and the HARP, on the one hand, and the Home Owner's Loan Corporation (HOLC) of the 1930s, on the other. Economic historians followed by reconsidering public policy toward housing during the Great Depression.[32] They analyzed the mortgage purchase and conversion programs of the HOLC, showing that these benefited a considerable fraction of homeowners. They estimated the impact on local housing markets, finding modest positive effects, especially in areas adversely affected by bank failures where the financial system was impaired and in no position to provide mortgage refinance on its own.

An interesting question pointed up by the experience of the Great Recession is why a significantly larger fraction of mortgagees, as many as one in ten, received mortgage relief in the 1930s. It was not as if banks were in a stronger position to absorb write-downs on existing mortgage loans or that homeowners were a more powerful lobby. It is not as if the decline in home prices in the 1930s was less.

The explanation is that the structure of mortgage lending made the necessary measures less costly for the public purse. In the Great Recession, many homeowners under water required principal reduction, which was costly and therefore more difficult to implement. The situation was different in the 1920s and 1930s, when lenders required down payments of as much as half the purchase price. As a result, relatively few homeowners found themselves with mortgages exceeding the value of their homes, even when prices fell by a third. This eliminated the need for radical write-downs of principal creating large losses for the banks or significant costs to the taxpayer. Bridging measures that kept housing finance flowing and provided help with interest payments could thus go a long way toward resolving the crisis. And these were what the HOLC offered.

[31] An example of a cross-country study that focuses on historical experience generally, and not simply the Great Depression, but is still relevant in this context is Jorda, Schularick and Taylor (2014).
[32] See for example Fishback, Flores-Lagunes, Horrace, Kantor and Treber (2010) and Fishback, Rose and Snowden (2013).

This lesson, that the structure of mortgage finance mattered importantly in the 1930s, is something that we now better appreciate having lived through a mortgage and housing crisis of our own.

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A final aspect of the Great Recession is its impact on labor markets. In the U.S., unemployment peaked at 10 percent in late 2009 before heading back down. In the Eurozone, in contrast, unemployment peaked at 12 percent in 2012-3 and remained elevated. These generalizations disguise considerable variation within the respective economies – compare Arizona and Texas, or Germany and Greece. In Germany, unemployment rose only from 7.4 percent to 7.9 percent between 2009 and 2009, after which it resumed its fall. Observers attribute this not only to the resilience of the German economy but also to the flexibility of wages (through the country's so-called Alliances for Jobs, in which workers agreed to wage cuts in return for a promise of job stability), and to agreements for work-sharing negotiated by unions and employers (together with government subsidies for short-time working hours).[33] In the United States, by comparison, there was little job sharing: average weekly hours fell from 34.6 in early 2008 to 33.8 in late 2009, before recovering to earlier levels.

Since at least Bernanke (1986), economists have been aware that that there was also considerable job sharing in the United States in the 1930s. A significant fraction of the decline in labor input in the U.S. then took the form of shorter hours. The UK, in contrast, saw nothing similar. The irony is that the U.S. and European responses were exactly the reverse in the 1930s of what they were in the early 21st century (to the extent that the UK can be considered European).

Hatton and Thomas (2010) and Hannah and Temin (2010) ascribe the contrast to the very different labor market institutions of the two countries. Britain had already put in place a relatively generous system of unemployment insurance in the 1920s, which removed the incentive for short-time work, since part-time workers did not qualify for benefits. The United States had no such system prior to the New Deal, so President Hoover sought to spread the burden by encouraging firms to reduce hours worked by their employees.[34] We can thus expect to see more research in the future on the effects of these labor-market institutions in the 1930s.

There was also controversy in the 1930s about the efficacy of nominal wage cuts. Business pushed for wage cuts in order to maintain profitability, arguing that lower labor costs were needed to make additional hiring attractive. But others, including Hoover himself, worried about the impact on spending and urged large firms to maintain the prevailing level of compensation. Wage and price cuts could have encouraged expectations of deflation, which would have raised real interest rates, given that nominal interest rates were already near zero.[35] In an environment where it was critical to replace expectations of deflation with expectations of inflation, higher wages might be part of the solution, not part of the problem (an argument frequently heard in connection with Japan in 2014-5). To this end, the New Deal involved a variety of measures – adoption of a federal minimum wage, negotiation of industrial codes – that placed significant upward pressure on wages, both nominal and real, starting in 1934. The Popular Front government in France pursued similar policies starting in 1936 in conjunction with its own version of the New Deal.

[33] See the discussion in Burda and Hunt (2011).
[34] See also Neumann, Taylor and Fishback (2013).
[35] The relevant analysis is in DeLong and Summers (1986).

Recent work on the 1930s, inspired by the experience of wage adjustment in the Great Recession, suggests that the negative supply-side effects of these high wage policies dominated any positive demand-side effects. Taylor (2009) estimates that the increase in real wages under the New Deal reduced employment by some 2.5 million workers.[36] In their analysis of France in 1936, Cohen-Setton, Hausman and Wieland (2014) find that limits on weekly hours not accompanied by reductions in weekly compensation had strong negative effects on production and prevented the French economy from recovering after the country abandoned the gold standard in 1936.

It would be nice if countries like Greece could be told that higher wages, rather than lower wages, will help to solve their problem of depression-like conditions. Alas, evidence from the 1930s provides little support for this view. Higher earnings are a consequence of economic recovery. They are unlikely to be the cause.

* * * * *

The English philosopher R.G. Collingwood, in *The Idea of History*, wrote that "the historian can genuinely see into the past only so far as he stands firmly rooted in the present." Collingwood was arguing that it is not only the case that perceptions of the past color and inform our understanding of the present; in addition, present circumstances and perceptions frame and influence our understanding of the past.

Some will take this as a council of despair or an endorsement of post-modernism – that there is no such thing as objective history. That is not my view. I am arguing that there is such a thing as objective history, but that the historical canvas is vast and complex. Writing history therefore requires one to pick and choose. And what elements we pick – what we emphasize and how we emphasize it – will inevitably reflect present circumstances and perceptions.

It is therefore inevitable that, having now lived through our Great Recession, we will write the history of the Great Depression differently. We will not dismiss the effectiveness of monetary and fiscal policies so easily. We will try to understand better why interwar policy makers were reluctant to use those instruments more aggressively. We will not run horse races between the liquidity-crisis and solvency-crisis interpretations of bank failures but recognize that, in the 1930s as more recently, the line between liquidity and solvency is hard to draw – even ill defined – in practice. We will put more emphasis on the credit boom in the preceding period and on the household balance sheet in the crisis itself.

And we will be more aware of how our own experience shapes our understanding of the past.

[36] Cole and Ohanian's (2004) estimate, obtained prior to our recent crisis, is larger; their simulations suggest that New Deal legislation raised real wages by as much as 20 percent between 1934 and 1939, adding six percentage points to the unemployment rate.

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