THE MISUSE OF ECONOMIC HISTORY: FLAWED ANALOGIES WITH JAPAN'S "LIQUIDITY TRAP" AND THE GREAT DEPRESSION Alan Reynolds

Paul Samuelson (2005: 242) advises that, "The sage economist must muster best available knowledge about history and theory in giving plausible pragmatic advice." Economists frequently use historical anecdotes to justify theories they prefer and policies they advocate. Unfortunately, policy-motivated history often depends on "stylized" facts and hazy metaphors—such as bubbles bursting, central banks pushing on strings, and budget deficits jump-starting the economy.

By early 2009, the global recession and financial crisis were being widely compared to the Great Depression or Japan's "Lost Decade." Writing about the U.S. economy in mid-2009, Krugman (2009a) notes this is "the third time in history that a major economy has found itself in a liquidity trap." The other two traps were the United States in 1929–39 and Japan in the 1990s. In all three cases, he argues, the alleged impotence of monetary policy justifies very large debt-financed government spending plans. On the basis of theory, Krugman (1998) once proclaimed, "When the economy is in a liquidity trap, government spending should expand up to the point at which full employment is restored" (emphasis in the original).

The Federal Reserve more than doubled the monetary base in five months, between August 2008 and January 2009. In response, Krugman (2009a) wrote that, "A rising monetary base isn't inflation-

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ary when you're in a liquidity trap. America's monetary base doubled between 1929 and 1939; prices fell 19 percent. Japan's monetary base rose 85 percent between 1997 and 2003; deflation continued apace."

There is no question that the demand for base money increases substantially during any period of widespread bank runs and failures. Banks naturally want more reserves as a cushion against possible bank runs, and the public wants to keep less cash in banks and more in currency. A liquidity trap, however, suggests the demand for reserves and currency is *insatiable*, so central banks cannot possibly finance inflation or even resist deflation (Boianovsky 2004). As Krugman (2009b) explains, "My definition of a liquidity trap is, purely and simply, a situation in which conventional monetary policy—open-market purchases of short-term government debt—has lost effectiveness. Period. End of story." Taken literally, that definition implies the Federal Reserve could buy up outstanding Treasury bills and commercial paper without the slightest risk of inflation (Hamilton 2008, Grier 2008).

This article questions the data Krugman uses to suggest that the Federal Reserve's recent doubling of the monetary base in five months was in any sense comparable to (1) what the Fed did in 1929–39 and (2) what the Bank of Japan did during the Lost Decade. I find that monetary policy was *not* ineffective (for good or ill) in the United States during the 1930s, or in Japan since 1991.

Krugman uses the alleged impotence of monetary policy as an argument for aggressive use of debt-financed government purchases and transfers. But his argument is problematic. Ineffectiveness of monetary stimulus would not demonstrate the effectiveness of fiscal stimulus. Indeed, I find no evidence that traditional fiscal policy stimulated real or nominal GDP growth during the Great Depression or Japan's Lost Decade. These historical case studies are consistent with other evidence casting doubt on the empirical validity of the view that budget deficits are an effective way to accelerate growth of domestic demand.

Liquidity Trap in the Great Depression?

Keynes (1937: 207–8) described something similar to a hypothetical liquidity trap. But he said, "I know of no example of it" other than a "very abnormal" episode "in the United States at certain dates in 1932."

By writing that "America's monetary base doubled between 1929 and 1939; prices fell 19 percent," by contrast, Krugman implies that monetary policy was ineffective against an entire decade of continuous deflation. Yet two years are not an adequate time series to determine what happened *between* 1929 and 1939, when there were two deep recessions and two brisk recoveries.

Table 1 shows that real GDP grew, on average, by 10.9 percent a year during 1934–36 with consumer prices rising, on average, by 2.3 percent a year (and by 3.6 percent in 1937). There was another deep recession from May 1937 to June 1938, followed by another vigorous recovery.

Krugman claims the U.S. economy grew rapidly from March 1933 to May 1937 because of "New Deal policies." That suggests rapid increases in federal spending or large budget deficits. Yet the last two columns of Table 1 show federal budgets grew much more slowly in 1933–36 (1.8 percent a year) than in 1930–32 (14.7 percent a year). If big government spending was the solution, 1932 should have been a terrific year.

Contemporary estimates of budget deficits as a share of GDP, in the last column, go back to 1934. Even within a Keynesian model, those deficits were much too small to explain the strength of economic growth before and after the 1937–38 contraction.

Describing the May 1937 downturn, Krugman (2009a) says, "The Federal Reserve tightened monetary policy, while FDR tried to balance the federal budget. Sure enough, the economy slumped again, and full recovery had to wait for World War II." The Fed doubled reserve requirements from May 1, 1937, to April 15, 1938 (Orphanides 2004). The recession began in May 1937 and ended in June 1938 (two months after the Fed reversed that policy). Since there was no discernable impact on short-term interest rates, however, Krugman's liquidity trap hypothesis precludes him from blaming the ensuing recession on monetary policy. If changes in Fed policy were that powerful (and they were), monetary policy was not ineffective.

The allusion to World War II looks like a red herring designed to put a fiscal spin on a recession that began and ended with changes in *monetary* policy. Drafting 11 million soldiers certainly reduced

		MEASURES OF FISCAL POLICY	MEASURES OF FISCAL POLICY		
	Real GDP (% change)	Inflation (CPI)	Unemployment Rate (%)	$\begin{array}{c} {\rm Federal} \\ {\rm Spending} \\ (\% \ {\rm change}) \end{array}$	Budget Deficit (% of GDP)
1929	NA	0	3.2	5.7	NA
1930	-8.6	-2.3	8.9	6.2	NA
1931	-6.5	-9.0	16.3	7.7	NA
1932	-13.1	-9.9	24.1	30.2	NA
1933	-1.3	-5.1	25.2	-0.1	NA
1934	10.9	3.1	22.0	4.5	-7.9
1935	8.9	2.2	20.3	-0.2	-4.0
1936	13.0	1.5	17.0	3.0	-17 -17
1937	5.1	3.6	14.3	-0.8	-2.5
1938	-3.4	-2.1	19.1	-0.1	-0.1
1939	8.1	-1.4	17.2	3.1	-3.2 -
1940	8.8	0.7	14.6	0.9	-3.0

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civilian unemployment, but the draft is an in-kind tax rather than a "fiscal stimulus." Investment and per capita consumption fell during World War II, Higgs (1992) finds, once we account for the statistical illusions created by price controls and rationing.

Krugman contrasts the gradual doubling of the U.S. monetary base from 1929 to 1939 with falling prices (during half of those years) to suggest the Fed was *trying* to stop an inexorable deflation for a decade but was thwarted by a liquidity trap. Those conjectures are inconsistent with all relevant facts.

Table 2 shows four key measures of monetary policy from 1928 to 1940. The first column reflects access to the Fed's discount window, which was tightly limited after 1929. Federal Reserve credit in the second column ("Fed credit") includes discounts but adds the effect of open market operations on the monetary base. Aside from April to June of 1932, the Fed made no significant effort to buy securities to expand bank reserves (Epstein and Ferguson 1984). On the contrary, the Fed *sold* securities from 1929 through early 1931, and again in 1937, to sterilize gold inflows. How could the shrinkage of Federal Reserve assets from 1928 to 1931, or the unchanged level of Fed credit from 1933 to 1940, be compared to the rapid doubling of the Fed's portfolio after August 2008?

Krugman (2009c) argues "a Friedman-style focus on a broad monetary aggregate gives the false impression that Fed policy wasn't very expansionary. But it was; the problem was that since banks weren't lending out their reserves and people were keeping cash in mattresses, the Fed couldn't expand M2." On the contrary, the last column shows that M2 fell when the Fed was tight in 1929–33 and 1938, but rose quite rapidly during the two expansions.

The United States devalued the dollar in March 1933, the same month the first wave of the Great Depression ended. Since foreigners were offered more dollars for their gold, foreign gold began to pour in (shown in the third column), which is why the base expanded. As a result, banks soon had a comfortable cushion of "excess" reserves to protect against runs.

Devaluations in the United States and Britain clearly helped "reflate" the world economy. Most U.S. and foreign tariffs were specific (levied as cents per item or pound), so effective tariff rates were reduced by higher prices. Reflation in Britain also shrank the real value of the dole, boosting work incentives (Cole and Ohanian 2002).

	VIII	MEASURES OF U.S. MONETARY FOLICY (\$ Millions, except M2)	except M2)		
	Bills Discounted	Fed Credit	Gold Stock	Excess Reserves	$ (M2) \ (M2)$
1928	840	1,505	3,919	0 9	3.8
1929 1930	952 272	1,459 1.087	3,996 4,173	43 55	-1.9
1931	327	1,274	4,417	89	-6.6
1932	521	2,077	3,952	256	-15.6
1933	283	2,429	3,059	528	-10.6
1934	36	2,502	7,512	1,564	6.6
1935	7	2,457	9,059	2,469	13.7
1936	9	2,481	10,578	2,512	11.3
1937	14	2,554	12,162	1,220	5.1
1938	6	2,600	13,250	2,522	0
1939	ю	2,628	16,085	4,392	8.3
1940	4	2,487	19,865	6,326	12.0

By 1936, however, the Fed imagined the economy was growing too fast, so they slashed "excess" reserves in 1937, as is evident in the fourth column.

Although short-term interest rates were very low throughout the 1930s, the quantity of bank reserves and currency remained critically important during the deflationary period of 1930–33, the mildly inflationary recovery of 1934–36, the 1937 recession, and the subsequent recovery after June 1938. To describe the 1929–39 period as one continuous liquidity trap dominated by fiscal policy is inconsistent with the data.

If federal budgets and the Federal Reserve were the only government policies that affected the economy, our figures clearly confirm Romer's (1991) finding: "Monetary developments were very important and fiscal policy was of little consequence in the mid and late 1930s. . . . Even in 1942, the year that the economy returned to its trend path, the effects of fiscal policy were small."

Taxes, Tariffs, and Regulations

Mono-causal explanations of the Great Depression are neither necessary nor sufficient. Monetary forces dominated the deflationary periods, 1930–33 and 1938. Yet the strong recovery after June 1938 was mildly deflationary, and the aborted recovery of 1934–36 was mildly inflationary. Moreover, such financial matters as the falling value of collateral for bank loans were surely affected by *real* events, which include effects of changing tax rates (Shimer 2009) and tariffs on the supply and productivity of labor and capital.

Romer and Romer (2007) found that "exogenous tax increases have a large, rapid, and highly statistically significant negative effect on output." Pondering why these effects were sustained for years, they suggest "tax changes could have large supply-side effects."

When examining such negative output shocks from higher tax rates in the 1930s, however, Cole and Ohanian (2007: 33) claim, "Tax rates on labor and capital changed very little during 1929–33, which implies they were not important for the decline." In reality, marginal tax rates were virtually tripled in June 1932, retroactive to January of that year. The lowest marginal tax rate rose from 1.1 percent to 4 percent; the highest from 25 percent to 63 percent. There were also big increases in excise, corporate, and estate taxes (Blakey and Blakey 1932). Because Cole and Ohanian appear

unaware of the Revenue Act of 1932, their estimate that "higher taxes played a relatively minor role" surely understates the 1932 fiscal shock.

Some economists who downplay or ignore the huge 1932 tax increase nonetheless suggest, inconsistently, that a more modest increase in tax rates in 1936, or the new 2 percent Social Security tax in 1937 (Romer 2009), contributed significantly to the deep recession from May 1937 to June 1938.

Crucini and Kahn (2007: 318) estimate that adverse effects of the Smoot-Hawley tariff on producer input costs and exports "amount to between 7 and 16 percent of the decline in output observed from 1929 to 1933." However, that estimate fails to account for indirect effects of trade warfare in deflating prices of traded goods and contributing to defaults on farm and foreign loans (Reynolds 1979, Sumner 1992). Estimates based only on the 1930 tariff also neglect the fact that the Revenue Act of 1932 further increased tariffs on oil, coal, rubber, lumber, copper, and other goods (Blakey and Blakey 1932).

As Crucini and Kahn (2007: 318) observe, "For any event of such magnitude it is likely that there were many contributing factors." Those factors were not confined to monetary mistakes, but also included President Hoover raising tariffs in 1930 and tax rates in 1932, and both Hoover and FDR helping to cartelize industries and raise real wage rates in unionized cartels (Ohanian 2009, Shimer 2009).

Liquidity Trap in Japan's Lost Decade?

In 2009, Krugman republished his 1999 book, *The Return of Depression Economics*. The new sections claim the Federal Reserve is now "presiding over a Japan-style liquidity trap" and the United States finds "itself looking like Japan a decade earlier" (Krugman 2009d: 5, 175).

Just as there are no similarities between what the Fed did in the 1930s and what the Fed has done in 2008–09, however, there are likewise no meaningful similarities between either of those episodes and what the Bank of Japan did from 1992 to 2002 (the period Krugman's book describes as the "Lost Decade"). Japan's nominal short-term interest rates were indeed very low by 1999. But super-low interest rates can be a symptom of extremely tight money, as in

the early years of the Great Depression, rather than the result of monetary ease.

Even when the interest rate on short-term government securities is near zero, that low rate imposes no limit on how much new money a central bank can create by buying public or corporate bills and bonds. Monetary expansion, in turn, can sink a currency's exchange rate, steepen the yield curve, provoke speculation in financial or tangible assets, and more. As Orphanides (2004) explains, "Monetary expansions can influence prices of longer-term bonds and other assets, including prices of equities and foreign exchange, because none of these prices is determined *solely* by today's short-term rate of interest" (see Bernanke and Reinhart 2004; Miron, Romer, and Weil 1994).

Table 3 illustrates Japanese policy and performance from 1991 to 2008. If only one decade was lost, when did that Lost Decade end? Japan's industrial production in 2008 was only 2.9 percent larger than it had been in 1991, although U.S. industrial production rose 58 percent in those years. Then from June 2008 to February 2009, industrial production fell by 35 percent in Japan, compared with a 10 percent drop in the United States.

Growth of Japan's GDP and industry did improve a bit from 2004 to 2007, but that presents a mystery for macroeconomists with their limited selection between monetary and fiscal stimulus. The monetary base declined at times after 2003, growth of broad money was consistently near zero, and budget deficits were uniquely small in 2006–07. Perhaps less stimulus was really more?

Table 4 focuses on Krugman's liquidity trap hypothesis as it applies to Japan in the 1990s, which was heretofore described as the Lost Decade. Krugman's evidence of a liquidity trap, however, is that, "Japan's monetary base rose 85 percent between 1997 and 2003; deflation continued apace" (Krugman 2009a).

Japan's "Lost Decade" began in 1992, yet Japan's monetary base grew by only about 4 percent a year from 1991 to 1996 (Table 4). If the Bank of Japan was "pushing on a string," it wasn't pushing very hard. That may help explain why Krugman starts his monetary time series with 1997, just before a tax-shock recession. Then he stops counting in 2003, shortly before the monetary base began falling even as the economy improved.

After 18 months of a zero–interest rate policy in the wake of the 1998 Asian recession, the Bank of Japan tightened monetary policy

			TABLE 3			
	JAPAN	JAPAN: BUDGET DEFICITS, MONEY, GDP, AND JOBS	TICITS, MONEY	GDP, AND JC	BS	
	Deficit (% of GDP)	M2 + CDs (% change)	Yen per Dollar	Real GDP	Industrial Production	Employment (millions)
					(2002 = 100)	
1991	-0.4	2.3	134.7	3.4	110.4	63.4
1992	-2.4	-0.2	126.7	1.0	103.6	64.4
1993	പ.5 പ	2.2	111.2	0.2	99.7	64.5
1994	-4.3	2.8	102.2	1.1	100.5	64.5
1995	-4.4	3.2	94.1	2.0	103.8	64.6
1996	-4.1	3.0	108.8	2.7	106.1	64.8
1997	-3.5 -	3.9	121	1.6	110.1	65.6
1998	-10.6	4.0	130.9	-2.0	102.5	65.1
1999	-7.3	2.7	113.9	-0.1	102.7	64.6
2000	-6.4	1.9	107.8	2.9	108.5	64.5
2001	-5.9	3.3	121.5	0.2	101.2	64.1
2002	-6.7	1.8	125.4	0.3	100.0	63.3
2003	-6.7	0	115.9	1.4	103.0	63.1
2004	-5.2	0.8	108.2	2.7	108.0	63.3
2005	-6.2	0.4	110.2	1.9	109.4	63.5
2006	-1.0	-0.4	116.3	2.0	114.3	63.8
2007	-2.6	0.8	117.8	2.4	117.5	64.1
2008	NA	0.8	103.4	-0.6	113.6	63.8
SOURCES: www.adb	.org/Documents/Books/Key_Indicators/2009/pdf/JPN.pdf; industrial production: CEA (2009)	oks/Key_Indicators	/2009/pdf/JPN.pd	; industrial prod-	uction: CEA (2009	

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JAPAN'S LOST DECADE: TABLE 4 MONEY, INFLATION, AND DEMAND (% change)					
	Monetary Base	M2 + CDs	Consumer Prices	Nominal GDP	
1001					
1991	2.9	2.3	3.4	6.4	
1992	1.4	-0.2	1.6	2.7	
1993	3.9	2.2	1.3	0.9	
1994	4.1	2.8	0.6	0.8	
1995	6.2	3.2	-0.1	0.8	
1996	6.8	3.0	0.1	3.5	
1997	8.2	3.9	1.9	1.9	
1998	6.3	4.0	1.6	-2.2	
1999	5.6	2.7	0.3	-1.0	

SOURCES: Monetary base and GDP: Bernanke (2000); M2 and CPI (see Table 3).

from August 11, 2000, to March 19, 2001 (Orphanides 2004). Like the Fed in 1937, this tightening was scarcely ineffective (in raising unemployment and reducing industrial production). The Bank of Japan then reversed course and tried "quantitative easing" for a couple of years, which Krugman now deems ineffective. Yet Japan's economy performed relatively well from 2004 to 2007 in the face of falling producer costs in the GDP deflator (Japan's rising currency made oil, metals, and grain cheaper in yen).

The first and last columns of Table 4 are from Bernanke (2000), with the other two series updated. Bernanke suggests such figures imply the Bank of Japan had done insufficient quantitative easing (monetary base in the first column) to prevent deflation or sustain reasonable growth in nominal GDP.

Krugman uses slow growth of M2 to infer liquidity traps (except in the United States in 2009), but growth of Japan's M2 plus CDs accelerated modestly from 1993 to 1998 when the monetary base did. Note also, from Table 3, that the yen rose sharply in 1991–96 and 1998–2008, which is rarely a symptom of monetary ease.

If the Bank of Japan had been using either inflation, nominal GDP, or exchange rates as targets, the BOJ surely could and would

have expanded the growth of money through larger open market purchases or through the foreign exchange desk (Meltzer 2000).

Public Debts as Taxpayer Liabilities

Although money was only one of Japan's problems, alternating between tight and timid monetary policy was (as Bernanke put it) "a case of self-induced paralysis." Even if monetary policy had been impotent, however, that would not explain why an endless series of Krugman-style "fiscal stimulus" plans failed to stimulate anything.

Most facts in the 2009 edition of Krugman's *Return of Depression Economics* are a decade old, so the new edition still has the author fretting that "by 1996, [Japan] was running a quite nasty deficit of 4.3 percent of GDP," and concluding that "the attempt to jump-start the economy with deficit spending seemed to be reaching its limits." In reality, Japan had barely begun to test the limits of deficit spending by 1996.

There were 10 Japanese "fiscal stimulus" programs in the 1990s alone, focused on government spending. Government consumption, mainly public payrolls, rose from 5.9 percent of GDP in 1991 to 7.5 percent in 2003 (Horioka 2006: 35). Yet total employment did not increase at all from 1992 to 2007.

In 1998, before Japan's biggest deficits began, Posen (1998: 44) argued that fiscal policy had been tried only once (in September 1995) because "the actual size of the Japanese fiscal-stimulus packages . . . should be thought of as their public investment content." That inexplicable claim that government paychecks and transfer payments have a zero multiplier amounted to a convenient rewriting of Keynesian doctrine.

What actually happened in 1996 is that Japanese consumers had ample warning that the tax on consumption would rise in April 1997. Efforts to beat that tax hike, Posen (1998: 50) notes, "had an immediate effect on aggregate demand. Private consumption (presumably brought forward by consumers) rose by 1.9 percent of GDP in 1995 and 1.7 percent in 1996, versus only 0.9 percent in 1994." Such intertemporal tax shifting boosted consumer spending in 1995–96 and early 1997 at the expense of a sharp drop in 1998. Public works spending enacted in late 1996 could not possibly explain the 1995–96 spurt of private spending or its subsequent decline.

In reality, nearly two decades of repeated "fiscal stimulus" plans in Japan have exposed that whole concept as little more than a quaint hoax.

In 1998, Posen could still say, "The cumulative amount of additional public debt taken on was not excessive either by Japanese historical or by international standards." A decade later, Japan's public debt had reached 173 percent of GDP—nearly triple the U.S. level and second only to Zimbabwe.

In March 2008, presidential candidate Senator Hillary Clinton said, "I don't think we can work our way out of the problems we have in the broad-based economy with monetary policy alone. I think the Japanese tried that and tried that and tried that" (*Wall Street Journal* 2008). That conclusion, which seemed to echo Krugman's counseling, was surely backwards. When it comes to deficit spending, the Japanese tried that and tried that and tried that. All they have to show for it is increasing disincentives to work and invest in Japan, including the danger of even more oppressive, demoralizing taxation required to service all the public debt.

The absence of evidence of a liquidity trap in Japan does not mean all their economic problems could be solved by monetary policy alone. Central banks can print money, but they can't print investment opportunities or work incentives. The only way for interest rates to remain near zero for a long period of time is for real investment opportunities to remain weak and/or for monetary policy to remain deflationary.

The popular impression that nearly two decades of subpar economic performance could be attributed to deficiencies in domestic bank lending ("zombie banks") implies investors in the entire world were unwilling to finance promising projects in Japan. Hayashi and Prescott (2007) find "no evidence of profitable investment opportunities not being exploited due to lack of access to capital markets." Like Wilson (1999), they conclude that Japan has instead suffered major shocks to the prospective productivity of labor and capital which are arguably a consequence of the highest corporate tax rate in the OECD, plus harmful new taxes on land, capital gains, and household consumption (see Reynolds 1998, Entin 2008, Shoven 1989).

What Does Fiscal Stimulus Stimulate?

Echoing Krugman, Bartlett (2009) asserts, "When the economy is in a liquidity trap . . . monetary policy is impotent. An aggressive fiscal policy is essential to raise aggregate spending and get money circulating, otherwise it just piles up in bank accounts." Yet it is a *non sequitur* to claim a "liquidity trap" demonstrates that aggressive fiscal policy will "raise aggregate spending." Fiscal stimulus means selling more government securities; monetary stimulus mainly means central banks buying such securities with new money. Those are distinctly different policies, and their effectiveness raises distinctly different questions.

Do big budget deficits stimulate demand? In postwar U.S. data there is no discernable connection, over short periods or long, between cyclically adjusted budget deficits and the growth of final sales to domestic purchasers. It is easier to find connections between aggregate spending and exogenous monetary policy changes. But U.S. budget figures are not an ideal test, because postwar variations in U.S. budget deficits were small until 2009.

Several other countries, however, experienced dramatic swings between budget deficits and surpluses from about 1978 to 1992. In each case, those changes in public savings (as a share of GDP) were largely or entirely offset by opposite movements in private savings. Barro (1989) offers such data for Israel from 1983–87. Reynolds (1992) provides the relevant graphs for Britain, Sweden, Norway, and Japan. When these governments ran budget surpluses, household saving fell sharply. When they ran large deficits, household saving increased. This suggests people understand that "stimulus plans" amount to a deferred tax increase that will reduce disposable income in the future. In that case, "fiscal stimulus" *reduces* consumer spending (and investment too, according to Alesina et al. 2002).

The case studies in this article challenge the alleged ineffectiveness of monetary policy when interest rates are low. The evidence also adds to a growing literature expressing skepticism about the alleged potency of traditional fiscal policy.

Recent empirical research on the effect of debt-financed public spending plans raises serious doubts that such "fiscal stimulus" policies work as advertised, if they have any positive effects at all (Ganelli 2006, Mountford and Uhlig 2008, Alesina et al. 2002).

Conclusion

Even if Krugman had not erred in claiming, "the Fed couldn't expand M2" during the Great Depression, that uniquely testable description means we cannot possibly apply the phrase "liquidity trap" to recent U.S. experience. The annualized growth of M2 in the United States accelerated from 3.5 percent over the six months ending in August 2008 to 14.7 percent just six months later (CEA 2009).

As for fiscal policy, whether defined by budget deficits or growth of federal spending, there is no link between the apparent weakness of that sort of "stimulus" in 1933–36 or 1938–40 and the strength of real GDP growth in those years. Monetary policy, however, explains the two recessions of the 1930s and the two recoveries. The economy was injured by higher tax rates in 1932 and 1936–37 and by higher tariffs in 1930 and 1932, but those are critical issues raised by classical microeconomics, not Keynesian macroeconomics.

Japan illustrates the opposite policy mix—relying on increasingly costly "fiscal stimulus" plans, hoping that would offset the Bank of Japan's general unwillingness to accommodate the domestic and global demand for Japanese cash. Textbook fiscal policy was tested for years and it failed spectacularly. Perhaps because increased debts bring increased tax distortions, doubling the ratio of public debt to GDP did not invigorate the anemic Japanese economy. The economy performed relatively well for four years *after* the 1997–2003 period Krugman describes. But that contradicts his analysis, because Japan's monetary policy then became more deflationary and budget deficits were sharply curtailed.

The most relevant policy lesson from both the Great Depression and Japan's Lost Decade may be that traditional fiscal stimulus was at best irrelevant and most likely harmful (by contributing to increases in distortive taxes). Monetary policy remained quite powerful, for good and ill. There were other vital changes in tax, trade, and regulatory policies, however, which should lead to us to reject the dichotomy of choosing between fiscal versus monetary policy, and to question mono-causal explanations of such significant historic events.

References

- Alesina, A.; Ardagna, S.; Perotti, F.; and Schiantarelli, S. (2002) "Fiscal Policy Profits and Investment." *American Economic Review* 92 (June): 571–89.
- Barro, R. J. (1989) "The Ricardian Approach to Budget Deficits." *Journal of Economic Perspectives* 3 (Spring): 37–54.
- Bartlett, B. (2009) "To Opponents of the Stimulus: What Should We Have Done?" *Forbes* (21 August). Available at www.forbes.com/2009/08/20/opponents-stimulus-conservativesopinions-columnists-bruce-bartlett.html.
- Bernanke, B. S. (2000) "Japanese Monetary Policy: A Case of Self-Induced Paralysis?" In R. Mikitani and A. S. Posen (eds.) Japan's Banking Crisis and Its Parallels to U.S. Experience. Washington: Institute for International Economics.
- Bernanke, B. S., and Reinhart, V. R. (2004) "Conducting Monetary Policy at Very Low Short-Term Interest Rates." *American Economic Review* 94 (May): 85–90.
- Blakey, R. G, and Blakey, G. S. (1932) "The Revenue Act of 1932." American Economic Review 22 (December): 620–40.
- Boianovsky, M. (2004) "The IS-LM Model and the Liquidity Trap Concept: From Hicks to Krugman." *History of Political Economy* 36: 92–126.
- Board of Governors of the Federal Reserve System (1943) *Banking* and Monetary Statistics 1914–1941. Washington: Federal Reserve System.
- CEA (2009) *Economic Indicators*. Washington: Council of Economic Advisers (July).
- Cole, H. L., and Ohanian, L. E. (2002) "The Great U.K. Depression: A Puzzle and Possible Resolution." Federal Reserve Bank of Minneapolis, Research Department Staff Report 295 (October).

(2007) "A Second Look at the U.S. Great Depression from a Neoclassical Perspective." In T. Kehoe and E. Prescott (eds.) *Great Depressions of the Twentieth Century.* Minneapolis: Federal Reserve Bank of Minneapolis.

Crucini, M. J., and Kahn, J. A. (2007) "Tariffs and the Great Depression Revisited." In T. Kehoe and E. Prescott (eds.) Great Depressions of the Twentieth Century. Minneapolis: Federal Reserve Bank of Minneapolis.

- Entin, S. (2008) "Do Government Spending and Tax Rebates Stimulate Growth?" Cato Institute Capitol Hill Policy Briefing (December 18). Available at www.cato.org/events/081218entin.pdf.
- Epstein, G., and Ferguson, T. (1984) "Monetary Policy, Loan Liquidation and Industrial Conflict: The Federal Reserve and the Open Market Operations of 1932." *Journal of Economic History* 44 (December): 957–83.
- Ganelli, G. (2006) "Macroeconomic Impact of Fiscal Policy." *IMF Research Bulletin* 7 (1). Available at www.imf.org/External/Pubs/ FT/irb/2006/eng/01/index.pdf.
- Grier, R. M. (2008) "Reply to Krugman." Available at http://facultynstaff.ou.edu/G/Robin.M.Grier-1/sumner2.pdf.
- Hamilton, J. (2008) "Deflation Risk." Available at www.econ browser.com/archives/2008/10/deflation_risk.html.
- Hayashi, F., and Prescott, E. (2007) "The 1990s in Japan: A Lost Decade." In T. Kehoe and E. Prescott (eds.) *Great Depressions of the Twentieth Century.* Minneapolis: Federal Reserve Bank of Minneapolis.
- Higgs, R. (1992) "Wartime Prosperity? A Reassessment of the U.S. Economy in the 1940s." *Journal of Economic History* 52 (1). Available at www.independent.org/newsroom/article.asp?id=138.
- Horioka, C. Y. (2006) "The Causes of Japan's 'Lost Decade': The Role of Household Consumption." Institute of Social and Economic Research, Osaka University. Available at www.iser.osaka-u.ac.jp/library/dp/2006/DP0661.pdf.
- Keynes, J. M. (1937) *The General Theory of Employment, Interest and Money.* London: Macmillan.
- Krugman, P. (1998) "Optimal Fiscal Policy in a Liquidity Trap." Memo (December 29). Available at www.princeton.edu/ ~pkrugman/optimalg.pdf.

_ (2009a) "Stay the Course." New York Times (15 June).

(2009b) "What's in a Name?" Available at http://krug man.blogs.nytimes.com/2009/01/26/whats-in-a-name.

(2009c) "Way Off Base." Conscience of a Liberal blog. Available at http://krugman.blogs.nytimes.com/2009/06/13/ way-off-base.

(2009d) The Return of Depression Economics and the Crisis of 2008. New York: W.W. Norton.

- Meltzer, A. H. (2000) "Monetary Policy in the New Global Economy: The Case of Japan." *Cato Journal* 29 (1): 69–72.
- Miron, J. A.; Romer, C. D.; and Weil, D. N. (1994) "Historical Perspectives on the Monetary Transmission Mechanism." In N. G. Mankiw (ed.) *Monetary Policy*. Chicago: University of Chicago/NBER.
- Mountford, A., and Uhlig, H. (2008) "What Are the Effects of Fiscal Policy Shocks?" NBER Working Paper No. 14551 (December). Available at www.nber.org/papers/w14551.
- Ohanian, L. E. (2009) "What—or Who—Started the Great Depression?" NBER Working Paper No. 15258. Available at www.nber.org/papers/w15258.
- Orphanides, A. (2004) "Monetary Policy in Deflation: The Liquidity Trap in History and Practice." North American Journal of Economics and Finance 15 (1): 101–24.
- Posen, A. (1998) *Restoring Japan's Economic Growth*. Washington: Peterson Institute for International Economics.
- Reynolds, A. (1979) "What Do We Know about the Great Crash?" *National Review* (9 November). Available at www.cato.org/pubs/articles/reynolds_speech_19791109.pdf.

(1992) "A Reconstruction of Macroeconomics." Memo, Alan Reynolds Associates. Available at www.heartland.org/ article/25980.

(1998) "Toward Meaningful Tax Reform in Japan." Paper presented at "Deregulation in the Global Market Place," a Keidanren-Cato Symposium, Tokyo (6 April). Available at www.freetrade.org/node/555.

(2009) "Depressing Economics." Forbes (19 January).

Romer, C. (1991) "What Ended the Great Depression?" NBER Working Paper No. 3829 (September). Available at www.nber.org/ papers/w3829.

(2009) "The Lessons of 1937." *The Economist* (20 June).

Romer C., and Romer, D. (2007) "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks." NBER Working Paper No. 13264 (July). Available at www.econ.berkeley.edu/~cromer/RomerDraft307.pdf.

Samuelson, P. (2005) "Response from Paul A. Samuelson." *Journal of Economic Perspectives* 19 (3): 242–44.

- Shimer, R. (2009) "Convergence in Macroeconomics: The Labor Wedge." American Economic Journal: Macroeconomics 1 (1): 280–97.
- Shoven, J. B. (1989) "The Japanese Tax Reform and the Effective Tax Rate on Japanese Investments." In L. H. Summers (ed.) *Tax Policy and the Economy*, Vol. 3. Cambridge, Mass.: MIT Press/NBER.
- Sumner, S. (1992) "The Role of the International Gold Standard in Commodity Price Deflation: Evidence from the 1929 Stock Market Crash." *Explorations in Economic History* 29 (July): 290–317.

Wall Street Journal (2008) "Hillary's Bad History" (31 March).

Wilson, D. (1999) "Is Shutting Krugman's Liquidity Trap the Solution to Japan's Problems?" East Asian Bureau of Economic Research, Finance Working Paper No. 427. Available at http://dspace.anu.edu.au/bitstream/1885/40457/2/pep-297.pdf.