

MONEY AND THE PRESENT CRISIS

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We remain in an economic crisis and financial crisis, one that Gary Gorton has named “The Panic of 2007” (Gorton 2008). The thesis of this article is that monetary policy has played a pivotal role. Under Alan Greenspan and now Ben Bernanke, the Fed has conducted monetary policy so as to foster moral hazard among investors, notably in housing (O’Driscoll 2008a). More generally, the crisis is the product of a “perfect storm” of misguided policy. Policies to encourage affordable housing fostered the growth of subprime lending and complex financial products to finance that lending. Regardless of the desirability of the social goal, the financial superstructure depended on housing prices never falling. Housing prices do fall sometimes, and did so decisively beginning in 2007 (Gorton 2008: 50).

It is largely a myth that unregulated financial capitalism failed and new regulation is needed. Aside from health care, financial services is the most heavily regulated industry in the economy. No part of it completely escaped regulation and most parts were heavily regulated, typically with multiple government agencies overseeing the activities of financial services firms.

The last legislative deregulation occurred in 1999 during the Clinton administration. The most significant change it wrought was to permit commercial and investment banks to combine into universal banks. (In reality, the statute legalized and regularized activities

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already in place.) All such entities (e.g., Citigroup and JPMorgan Chase) have survived the debacle. Stand-alone investment banks, the legacy of Glass-Steagall, have fared much worse. Of the five major investment banks operating at the beginning of 2008, Merrill Lynch merged with a commercial bank, Bank of America; the Fed financed and arranged for the shotgun marriage of Bear Stearns with JPMorgan Chase; Lehman failed; and Goldman Sachs and Morgan Stanley each sought protection by transforming themselves into bank holding companies. Born in one crisis, Glass-Steagall's 75-year-old separation of commercial and investment banking was undone by another.

In 2004, by unanimous vote among the commissioners, the SEC changed the net capital rules designed to protect brokerage accounts at investment firms. The SEC wanted to apply international standards for commercial banks to investment banks. There is still controversy over whether the commissioners intended to improve regulatory oversight, or ease capital standards. Investment banks certainly leveraged up after the change, as did commercial banks under the Basel capital standards. The attempt to establish risk-based capital standards has been a failure, as many (including the present author) predicted they would be when proposed. It is unclear whether a failed attempt at regulation should be termed deregulation. In any case, the SEC commissioners acted within their authority under existing law.

Regulation of financial services certainly failed, but not for lack of quantity (Dorn 2008). Former congressman John LaFalce described the performance of financial services regulators as competition in laxity. Those advocating enhanced regulation in response to the current crisis must explain why the system will work better in the future.

Financial services regulation pretty much functioned as Public Choice would have predicted: agencies were largely captured by the industries they regulate. Buiuter (2008: 102) defines capture and provides citations on the literature: "Capture occurs when bureaucrats, regulators, judges or politicians instead of serving the public interest as they are mandated to do, end up acting systematically to favor specific vested interests—often the very interests they were supposed to control or restrain in the public interest." To suppose it could be otherwise would be to adopt "a romantic and illusory" theory of politics

(Buchanan 1999: 46). It is unclear how adding more regulation would change that outcome.

The now-global financial crisis broke in the popular press in early 2007 when HSBC Holdings and New Century Financial disclosed increased loan loss provisions. The subprime crisis grew through 2007 and by year-end, more than 100 mortgage companies had suspended operations, sought buyers, or failed (as did New Century).

Problems spread among all classes of mortgages, and spilled over into other credit markets. The credit problems cascaded down onto bank balance sheets as problem assets. Gorton (2008) presents a comprehensive account of why problems in the subprime market caused a financial panic. In order to economically provide subprime mortgages, the financial system evolved a complex set of “interlinked securities, special purpose vehicles, and derivatives” related to subprime mortgages. The value of the securities was unusually sensitive to the value of the homes underlying the mortgages. Once the prices of these homes stopped rising and began falling, the effects rippled through the chain of securities and were magnified by lack of information about where the risk resided in that chain.

Consider a partial list of the fallout on financial institutions:

- Bear Stearns was forced to merge with JPMorgan Chase.
- Lehman Brothers failed.
- AIG was taken over by the Fed.
- Fannie Mae and Freddie Mac were put into conservatorship.
- WAMU was taken over by JPMorgan Chase.
- Wachovia was taken over by Wells Fargo (after a struggle with Citigroup).
- PNC took over National City.

In addition, the deposit insurance net was greatly expanded, limited insurance of money market funds was instituted, and government guarantees were extended to non-depository creditors and even, in at least one case, to preferred shareholders. The U.S. crisis spread overseas, in sometimes a more virulent form.

Before we can propose solutions, we must assess the institutions, policies, and incentives that produced the crisis. The seeds of the crisis were planted well before 2007 and the crisis is one in a series, not by any means *sui generis*. To anticipate this article’s main conclusion, the crisis is the product of implementing monetary policy in textbook fashion. How did this happen?

Monetary Theory and Policy

Much of the macroeconomic theory developed over the last 30 years excludes the possibility of the very problems confronting policymakers today (Temin 2008; Buiter 2008: 30n8). An earlier set of monetary theorists focused on these very problems. And their work influenced contemporary theorists.

The monetary theory underlying modern monetary policy evolved out of two main traditions, which for a long time were intellectually at odds with one another: monetarism and Keynesianism. The founder of monetarism is, of course, Milton Friedman. In numerous works, he presented and defended his version of the quantity theory of money. He also advocated a policy of controlling the rate of growth of the money supply to avoid or dampen economic fluctuations (Friedman 1956, 1960).

His 20th century intellectual progenitor was Irving Fisher (1913).¹ He presented an early version of the modern quantity theory. Fisher (1920) also proposed stabilizing an index of prices as the goal of monetary policy through his “compensated dollar scheme.” Not the first to advocate such an idea, he came to be closely associated with it.²

Monetarists today are more likely to advocate targeting an inflation rate or the growth of nominal GDP (Barro 1990: 21–25; McCallum 2007). The breakdown of the empirical relationship between various monetary aggregates, on the one hand, and prices and output, on the other hand, motivated the shift (Leijonhufvud 2007: 1; Buiter 2008: 79).³

Though eventually influential in economics through his intellectual successors, in his day Fisher’s views on monetary policy were in the minority (Schumpeter 1954: 872–73). One reason was the preoccupation of business cycle theorists with the volatility of

¹Friedman scarcely acknowledged Fisher in the development of the quantity theory. He was more likely to cite Fisher on interest rates or monetary policy in the 1930s. In his 1967 article, Friedman entirely omits Fisher even though he was in truth a central figure in the events recounted therein.

²Mises (1971: 402) succinctly summarized Fisher’s plan: “The dollar . . . ceases to be a fixed quantity of gold of variable purchasing power and becomes a variable quantity of gold of invariable purchasing power.”

³Researchers at a number of Reserve Banks, including St. Louis, produce alternative money stock measures. Some academic researchers also continue to work on producing reliable money measures. For a recent example, see Dutkowsky, Cynamon, and Jones (2006).

investment and capital values over the cycle. It is not possible to analyze two (or more) markets with only one price, the price level of output as a whole. One would need at least a price level for consumption and one for investment. Schumpeter (1954: 1095) called these “sectional price levels.”

Fisher pioneered elements of modern macroeconomics. Schumpeter (1954: 872) credits him with introducing the marginal efficiency of capital. His debt deflation theory, “contrary to his unduly restricted claim, applies to all recorded business cycles and is in essence not monetary at all” (Schumpeter 1954: 1122). Fisher was a reformer on a wide variety of issues, not all economic, and in his day was looked upon “as something of a crank” (Schumpeter 1954: 873). That limited his influence among his professional contemporaries. Full appreciation of his economic contributions came later.

Fisher’s fellow theorists were not convinced that the business cycle was solely a monetary phenomenon (Friedman and Schwartz 1963: 189), or a “dance of the dollar,” as Fisher (1923) argued. They were not convinced that monetary policy, certainly not monetary policy alone, could end depressions. Contrary to myth, by the onset of the Great Depression there was a consensus among American economists favoring public works and deficit finance (i.e., fiscal policy) as a cure for depressions. That view was particularly strong at the University of Chicago (Friedman 1967: 87-89). The Chicago School and a myriad of intellectual allies (e.g., J. M. Clark and Arthur R. Burns) were Keynesians (in policy) before Keynes (Davis 1971).

To sum up briefly, the business cycle theorists in the first third of the 20th century generally focused on the volatility of investment and capital values as a central problem to be explained. They often employed “sectional price levels” to analyze the path of investment separately from that of consumption. Fisher stands somewhat apart from other theorists for his focus on average prices and variations in overall purchasing power of money. His debt deflation theory tackled some of the issues treated differently by other theorists, and it was an original contribution.

Keynes enters the story in a complex way. He had begun his career as a conventional quantity theorist, as evidenced by his *Tract on Monetary Reform* (1924). In the 1920s, he supported stabilizing the price level, and there was an intellectual connection with Fisher on this point (Rothbard 1963: 174–76). With the publication of the *Treatise on*

Money in 1930, Keynes abandoned the quantity theory framework for the Fundamental Equations. These constituted sectional price levels. As Schumpeter (1954: 1095) explains it, sectional price levels “are also of pivotal importance for the ‘monetary dynamics’ of Keynes’s *Treatise*, Book II of which, entirely devoted to this subject, is the chief reference for this type of analysis.”⁴ As Leijonhufvud (1968: 23 and 23n14) later explained it, “The basic contention here is that a monetary injection (for example) will not impinge with the same force on all markets and all prices.” As the issue would later be framed, money is not neutral in the short run. Keynes needed his Fundamental Equations to analyze the monetary dynamics.

Keynes abandoned the Fundamental Equations under withering criticism from, among others, Hayek, Hansen, Hart, and Robertson (Leijonhufvud 1968: 23n15). In the *General Theory of Employment, Interest, and Money* (1936), Keynes articulated his theory of effective demand. Protean in economic doctrine, he never completely sloughed off the old when assuming a new intellectual mantle.

Keynes of the early 1930s fits squarely in the tradition of business cycle theorists, whose analysis focused on the cyclicity of investment and analyzed it using some type of sector or “sectional analysis.” As such, at this point in his intellectual development he could be juxtaposed to the Fisherian approach of having central banks target a price index to dampen economic fluctuations. In 1936, Vera C. Smith (1990: 189–90) could list a set of economists arrayed against the Fisherian position as including Mises, Hayek, Keynes, and Myrdahl. She cited Keynes’s *Treatise* on point.⁵

The Austrians long opposed the concept of an overall price level and any concept of aggregate demand. “The over-all price level ... hides the relative movements as against each other” and “these relative movements are of pivotal importance for certain cycle theories, especially for that of Professor von Hayek” (Schumpeter 1954: 1095). On this point, Keynes of the *Treatise* and Hayek had more in common than either had with Fisher. I return to Hayek later.

⁴Schumpeter’s magnum opus was published posthumously. There is an editorial note after this quotation: “This section was left unfinished.” The economics profession is poorer for not having Schumpeter’s further thoughts on this important issue in the history of economics. Only years later did Leijonhufvud (1968) elaborate the role of Keynes’s *Treatise* in the development of his thought.

⁵Vera Smith’s book was the product of her Ph.D. dissertation written under Hayek and is a much neglected work in monetary economics. She later married Friedrich Lutz and became Vera Lutz.

In policy, Keynes is most known today for his advocacy of counter-cyclical fiscal policy. At the 1931 meeting of the Norman Wait Harris Memorial Foundation Lectures and Round Tables, Keynes was a lecturer and active participant. He “persisted in arguing that monetary policy, particularly manipulation of the interest rate, was the key to recovery from depression. . . . Keynes was counting on fiscal policy as a transitional tonic” (Davis 1971: 122). Notably, only Keynes and Alvin Hansen weakened the case for a program of public works in America (Davis 1971: 120).

Chicago School economist Lloyd Mints tried to focus Keynes on fiscal policy. Keynes wanted to entertain using fiscal policy only “in the interregnum” until monetary policy could bring down interest rates (Davis 1971: 121–22). At this 1931 meeting, we perhaps see Keynes thinking in transition. But Keynes’s faith in the efficacy of monetary policy was still intact. Only in the *General Theory* did Keynes adopt the policy positions now most associated with him.

With the *General Theory*, however, the building blocks of Keynesian economics were in place, and (much) later the Keynesian/monetarist synthesis. Thanks to Freidman and his students, professional opinion came to accept quantity theory reasoning again. It had already accepted aggregate demand and supply analysis from Keynes.

As Friedman and his followers long emphasized, early Keynesianism was theoretically weak in separating nominal and real magnitudes. That was true in spades with respect to interest rates. Fisherian analysis filled in that lacuna with his distinction between nominal and real rates of interest (Friedman 1968: 101).

Today, the debates over monetary versus fiscal policy have largely been resolved pragmatically with the answer: both. Keynesians came to accept the monetarist evidence on the efficacy of monetary policy, but not the monetarist case for rules rather than discretion in monetary policy.⁶ Friedman’s preference for rules over authority in monetary policy derived from Henry Simons rather than Fisher. In effect, the economics profession chose Fisher over Friedman (Barro 1990: 23). Neoclassical macroeconomics evolved into a synthesis of Keynesianism and monetarism (though not necessarily the economics of either Keynes or Friedman).

⁶A point made orally by Leijonhufvud many years ago.

Some form of inflation or nominal income targeting is now accepted practice in central banks. Lingering disputes remain over feedback rules. The Fed's "dual mandate" of controlling inflation and maintaining full employment ensures that the central bank will respond in a discretionary fashion to economic weakness and downturns. Politics assures that discretionary fiscal policy will be part of the policy mix. The combination of rules and discretion has played an important role in the etiology of the current crisis.

Why then the succession of financial crises, bubbles, and their bursting? Is it a failure of policy or theory?

Inflation Targeting

Toward the end of his tenure as chairman of the Board of Governors of the Federal Reserve System in early 2006, many encomia were heaped upon Alan Greenspan. The high praise at times edged into adulation. Even sober observers such as Milton Friedman (2006) were effusive in their assessment, calling Greenspan's performance "remarkable." That, after noting that "for the first 70 years after it opened in 1914, the Fed did more harm than good."

Even at the time, I thought Friedman's assessment to be rash. He was judging contemporaneous economic data, not a legacy. Moreover, at a July 6, 2005, panel ("After Greenspan: Whither Fed Policy?"), Friedman noted that the performance of central banks around the world had generally improved. That suggested a common factor, a point to which I return shortly.

Various central banks, such as the Bank of England, the European Central Bank, the Swedish Riksbank, and the Reserve Bank of New Zealand, have adopted inflation targeting (Leijonhufvud 2007: 1). The Reserve Bank of New Zealand was a pioneer and did so under the Reserve Bank of New Zealand Act of 1989: "The primary function of the Bank is to formulate and implement monetary policy directed to the economic objective of achieving and maintaining stability in the general level of prices." The current Policy Target Agreement under the act is for an inflation range of 1–3 percent over the medium term.

The Bank of England came later to the game. Only the election of Tony Blair in 1997 and the ascendancy of Gordon Brown as chancellor of the exchequer brought formal independence to the Bank to pursue price stability. The European Central Bank (ECB) is mandated by statute to pursue price stability exclusively.

Neither the Fed nor the Bank of Japan ever explicitly adopted inflation targeting, and there is controversy over whether they have an implicit target. There were certainly suggestions by the Greenspan Fed that it had adopted inflation targeting. “Central bankers have long believed that price stability is conducive to achieving maximum sustainable growth” (Greenspan 2002: 2).

Leijonhufvud (2007: 1) succinctly resolved the issue. The Fed and the Bank of Japan may not have explicitly adopted inflation targeting, but have acted as if they had done so and “markets have believed that to be the case.” If one objects to that characterization, then he should be able to specify how the two central banks would have acted differently if they had explicitly adopted inflation targeting. Buiter (2008: 1n1) observes “an informal Fed CPI inflation target of just below 2.0 percent.” Buiter (2008: 6) cites a 2005 speech by Ben Bernanke admitting to a “comfort zone” for the core PCE deflator of 1–2 percent. An alternative interpretation of Fed policy is that they were following a Taylor Rule. But Taylor (2007: 2–4) argues the Fed deviated from the Taylor Rule during the 2002–06 period.

What has inflation targeting wrought? There appeared to have been a “Great Moderation of the housing cycle” beginning in the 1980s. Taylor (2007: 1) associates the diminution of the volatility in residential construction to “the Great Moderation of the volatility of real GDP and inflation which many researchers attributed to monetary policy.” That was the performance to which Friedman (2006) reacted. Perhaps so, but there has been a lot of financial turmoil in the era of inflation targeting. Leijonhufvud (2007: 3) reviews the global record of financial crises under inflation targeting. In the next section, I review the U.S. experience.

The U.S. Experience: 1980s and 1990s

The era of inflation targeting began in the 1980s. The Volcker Fed ended targeting of money in 1982 and moved toward targeting prices. Greenspan’s tenure began in 1987 and remained outwardly focused on prices. In the United States it was a decade of strong economic growth and two financial crises of epic proportions.

First, there was the S&L or thrift crisis in which approximately 1,300 out of 4,039 savings institutions failed in the 1980–94 period. That was principally a crisis resulting from moral hazard generated by a flawed deposit insurance system and dysfunctional regulation.

Double-digit inflation, which Paul Volcker was appointed to subdue, contributed to the crisis (FDIC 1998: 1).

Second, there was a crisis in commercial banking (with linkages to the S&L crisis). This crisis had a regional basis, beginning first in the Southwest and oil patch, and then spreading to New England. Some major banks, like Citibank, were involved. Between 1980 and 1994, approximately 1,600 FDIC-insured banks either failed or received FDIC funds to stay afloat. The crisis led to wholesale reform of bank regulation in the 1990s. FDIC insurance was put on sounder footing designed to insulate the taxpayer from exposure to the costs of bank bailouts. And interstate branch banking was authorized. Bank failures declined sharply from annual rate of over 250 in the mid-1980s to near zero by the mid-1990s.

There were also two notable stock market declines in the period, a dramatic crash in October 1987 and one associated with the collapse of the dotcom bubble in 2000. Whether properly denoted financial crises, they certainly constituted volatility in the financial markets. The effort to control, first money, then prices, has been accompanied by enhanced volatility in financial markets.

The Panic of 2007 is only the latest in a series of financial tsunamis. The pattern is bubble, crash, sometimes panic, reflation, and a new bubble. That cycle of crash and burn has terrible costs to the economy. There have been trillions of dollars of wealth destroyed in the current panic and the costs of bailouts and fiscal stimulus have long since passed the \$1 trillion mark. If this cycle is continued, it will, unjustly, erode the case for free markets generally.

Assessing Inflation Targeting

Low measured inflation has misled policymakers. To see why, return for a moment to the debates of the 1930s. The objection to stabilizing prices was that doing so would not necessarily stabilize economic activity. Stability of a price index obscures the dynamics of changing relative prices. Those, in turn, reflect underlying demand and supply in individual markets. Economic misallocation and imbalances can build up as easily with zero inflation as with positive (or negative) inflation.

As Leijonhufvud (2007: 5) phrased it, “The trouble with inflation targeting in present circumstances is that a constant inflation rate gives you absolutely no information about whether your monetary policy is right.” Leijonhufvud relies principally on Swedish econo-

mist Knut Wicksell. O'Driscoll relies on the approach taken by Mises (1971) and Hayek (1935):

Hayek argued that in a growing economy, the monetary policy that would stabilize a price index of consumer goods would interfere with the allocation of resources over time. It would do so by forcing interest rates below the level they would otherwise be. The price of long-lived assets, such as capital goods or housing, moves inversely to movements in the relevant interest rates. Lower interest rates translate into higher asset prices, and vice-versa.

Hayek and Mises described what we now call an asset bubble. And they did so for a zero-inflation case. Their theory did not rely on a change in average prices or the price level to generate the effects. It is a case of “easy money and no inflation” (Leijonhufvud 2007: 5). A short excursus in definition would be useful.

As a conceptual experiment, consider defining inflation classically in terms of its cause (money) instead of its effects (prices). Inflation would then be defined in such a way: an increase in the supply of money not offset by an increase in demand (Mises 1971: 240). There would then be nothing paradoxical about saying there is inflation, but little or no increase in the average price of consumer goods. For Mises and Hayek, a monetary shock worked through relative prices and especially inter-temporal prices. Only later in the process would prices of final goods be affected. As in many other business cycle theories, there is an interaction between investment and consumption that works its way through income. Keynes focused on that process in the *General Theory*, as did many of the business cycle theorists of the 1920s and 1930s.

Asset prices rise first, consumer goods prices later. So we can have a Mises/Hayek inflation without a Fisherian inflation. It fits current events very well, where consumer price inflation spiked only in the second half of the cycle.

It is not an argument about words, but substance. Monetary policy can misallocate resources independent of its effect on the CPI. Hayek assumed a world in which productivity changes were putting downward pressure on final goods prices. Arguably the Hayek model has even more relevance for our day than his. We live in a global economy with cheap imports and central bank absorption of dollars

into official reserves. Inflation targeting obscures the degree of monetary ease. As Buiter (2008: 65) put it, “Two-and-half billion Chinese and Indian consumers and producers entering the global economy might qualify as an epochal event capable of upsetting established historical regularities.”

In Hayek’s presentation, the monetary expansion would lead not to excessive investment, but *malinvestment*. Capital is misallocated. At some point, investment projects already begun would not be completed. That is Hayek’s crisis point in his analysis. The incomes generated in the expansion would create excess demand for consumer goods, eventually causing rising prices for consumer goods. Resources get bid away from long-lived investment projects into supplying consumer goods.

In a world of commodity money or pegged exchange rates, an inflationary process as described would be limited by a loss of reserves. In a world of fiat currency and floating exchange rates, it could continue without limit but prices would also rise without limit.

The world as Leijonhufvud (2007) outlines it mitigates some of the Hayek effects. In a global economy, the scarcity of consumer goods is relieved by imports, which remain cheap because foreign central banks absorb the excess supply of dollars into their official reserves. But capital misallocation persists. In a classic Hayekian crisis, investment projects cannot be completed because there is too much durable capital and not enough circulating capital (O’Driscoll 1977: 109–12). Think of rows of uncompleted houses on which work has ceased because the builders ran out of working capital. Think of Las Vegas (Achenbach 2008).

During the high-tech and telecom boom, too many miles of fiber optic cable were laid, and not enough miles of railroad track. That was a manifestation of malinvestment. When the history of the housing bubble is written, we will gain insight into the opportunity cost of malinvestment in housing.

Moral Hazard

Monetary policy has become the new source of moral hazard. The Greenspan Put was widely viewed among traders as an option to sell assets to the Fed. Buiter (2008: 100n31) says “the term was coined as a characterisation of the interest rate cuts in October and November 1998 following the collapse of Long-Term Capital Management.”

Greenspan explicated the doctrine underlying the Put in a December 19, 2002, speech. He argued that asset bubbles cannot be detected and monetary policy ought not to be used to prick them even if they could be detected. The Fed could detect the collapse of bubbles, and would use monetary policy to prevent asset-price deflation (Greenspan 2002: 3–4). Traders came to anticipate that a fall in asset prices would elicit easing by the Fed and reflation.

William McChesney Martin Jr., who served as Fed chairman 1951–70, famously said it was his job to take the punch bowl away just when everyone was beginning to have fun. Far from taking the punch bowl away when traders begin to make merry, the Fed now spikes it at the first sign of economic sobriety.

I have dubbed this the Greenspan Doctrine, and noted it implies an asymmetric monetary policy. While the Fed would not stop asset bubbles from inflating, it would act to prevent their deflation. Quoting himself in 1999 testimony, Greenspan (2002: 4) said that the Fed had focused on policies to “mitigate the fallout [of an asset bubble] when it occurs and, hopefully, ease the transition to the next expansion.” So the Doctrine had been long in place, which markets fully understood and had priced into assets.

Ben Bernanke succeeded Greenspan. Two months prior to Greenspan’s Economic Club speech, then Governor Bernanke had also delivered a speech in New York City. It was more academic and nuanced in tone. In those remarks, Bernanke (2002: 4) argued against trying to second-guess the markets on asset pricing:

The prices of equities and other assets are set in competitive financial markets, which for all their undeniable foibles are generally highly sophisticated and efficient. Thus, to declare the bubble exists, the Fed must not only be able to accurately estimate the unobservable fundamentals underlying equity valuations, it must have confidence that it can do so better than the financial professionals whose collective information is reflected in asset-market prices.

The argument is specious. The Fed inflated the asset bubble through its easy money policy and historically low interest rates in the aftermath of the bursting of the stock market bubble and later the knock-off effects of 9/11. Anna Schwartz (Carney 2008) recently summed up the historical record on asset bubbles or booms. The

asset whose price rises unsustainably differs in each historical episode, but in each case “the basic propagator was too-easy monetary policy and too-low interest rates.”

Moreover, the economic value of the Fed’s Put is incorporated in the price of assets. Indeed, the more asset pricing constitutes a bubble, the greater the value of the Put. By confirming the policy in speeches, Bernanke and Greenspan lessened any lingering uncertainty about it. The Fed cannot take a hands-off approach to asset markets, because it already has a hand in them. The central bank is like an arsonist watching a fire he set, expressing amazement at how such an event could have happened.

The Fed created moral hazard by first implicitly, then explicitly promising to bail investors out of risky commitments. Greenspan promised to “mitigate the fallout” from asset deflation. How does a central bank do that? By reflating asset prices, or, as Greenspan euphemistically put it in his 1999 testimony, “ease the transition to the next expansion.”

The low-interest policy anesthetized markets to risk. Risk-premia all but disappeared. Not regulatory laxity, but monetary laxity caused this. Perhaps regulators could have tried to push back more. We would then have had the contradiction of the supervision and regulatory side of the Fed trying to counter the effects of its monetary arm.

Greenspan knew what his low interest-rate policy was doing in the economy. Greenspan (2002: 7) described the dangerous game he was playing with monetary policy:

To be sure, the mortgage debt of homeowners relative to their income is high by historical norms. But, as a consequence of low interest rates, the servicing requirement for that debt relative to homeowners’ income is roughly in line with the historical average. Moreover, owing to continued large gains in residential real estate values, equity in homes has continued to rise despite very large debt-financed extractions. Adding in the fixed costs associated with other financial obligations, such as rental payments of tenants, consumer installment credit, and auto leases, the total servicing costs faced by households relative to their income appears somewhat elevated compared with longer-run averages. But arguably they are not a significant cause for concern.

That statement must go down as one of the great economic policy misjudgments of recent memory. It is, however, a real-time report on a housing boom in its takeoff phase. The boom could go on so long as housing prices continued to rise relative to incomes. That, of course, is not a sustainable situation. A prolonged and unsustainable rise in asset prices is a good working definition of a bubble. Greenspan apparently came to equate prosperity with a housing bubble.

Of course, the Greenspan Put eventually failed to pay off. It failed to provide financial security to markets, much as many other financial guarantees have failed. That failure goes to the heart of the debates among monetary theorists in the 1920s and 1930s. Irving Fisher believed that business cycles are largely a “dance of the dollar,” and monetary expansion alone would cure price deflation. (His theory of debt deflation should have given him pause about that.)

Theorists on the other side of the debate, such as Hayek and Mises, believed real misallocations had occurred in the stoking of asset prices. Monetary ease will not automatically reflate asset prices, because the falling asset prices are the realization of the effects of capital malinvestment. Some capital has been lost and there is less wealth than would otherwise have been the case. The loss of real capital also causes dislocation and unemployment of complementary labor.

Lachmann (1978: 3) succinctly explained the problem of malinvested capital: “For most purposes capital goods have to be used jointly. *Complementarity* is of the essence of capital use. But the heterogeneous capital resources do not lend themselves to combination in any arbitrary fashion.” Capital goods are not infinitely malleable. Malinvestment results not in “more” capital, but wasted capital. Again, the rows of uncompleted and unoccupied housing in Las Vegas exemplify malinvestment. The malinvestment is a consequence of the non-neutrality of expansionary monetary policy.

Hayek’s theory of economic fluctuations or cycles is both monetary and real. As Machlup (1974: 504) phrased it: “The fundamental thesis of Hayek’s theory of the business cycle was that *monetary* factors *cause* the cycle but *real* phenomena *constitute* it.”

The current situation gives the appearance of a classic boom and bust, chronicled by many of the business cycle theorists. It has a particularly Austrian flavor because of the excessive movement of resources into long-lived, housing capital (though the Austrians historically had focused on industrial cycles). And it has elements of a Fisherian debt

deflation. Overly indebted financial firms are scrambling for liquidity by selling assets. The asset sales drive price down, leading to margin calls and further asset sales. The debt incurred in the bubble drives the deflationary process to “undershoot” equilibrium in asset markets.

To answer a question posed earlier, there have certainly been errors in execution of monetary policy. The Greenspan Fed had trouble keeping within its presumed target of 2 percent inflation, and at times resorted to changing the inflation measure. The Fed underestimated inflationary pressures due to its focus on core inflation (Buiter 2008: 64). But it is fundamentally the underlying theory of inflation targeting that is wrong.

The Great Moderation now appears to be an *intermezzo*, dependent on special circumstances outlined by Leijonhufvud (2007). To his list, I would add an absence of negative supply shocks that bedeviled policymakers in the 1970s. Leijonhufvud’s globalization story can be interpreted as a positive supply shock benefiting central bankers in developed countries generally. Rather than a new-found commitment to monetary religion, central bankers faced a common, benign environment.

What Is to Be Done?

After winning the Nobel Prize in Economics in 1974, in the midst of the great inflation of that decade, Hayek (1979: 3) expressed his frustration at what should be done:

I find myself in an unpleasant situation. I had preached for forty years that the time to prevent the coming of a depression is during the boom. During the boom nobody listened to me. Now people again turn to me and ask how we can avoid the consequences of a policy about which I had constantly warned. I must witness the heads of the governments of all the Western industrial countries promising their people that they will stop the inflation *and* preserve full employment. But I know that they *cannot* do this. I even fear that attempts to postpone the inevitable crisis by a new inflationary push may temporarily succeed and make the eventual breakdown even worse.

Policymakers “*cannot*” now keep their promise of full employment, economic growth, and low inflation. The U.S. economy contracted at an estimated annual rate of 6.2 percent in the fourth quarter of 2008, and

unemployment was at 7.6 percent in January 2009. Financial markets continue to be roiled. The Fed's extraordinarily expansive monetary policy is widely expected to fuel inflation in a couple of years. It is fair to say that no legitimate goal of monetary policy is being met.

What absolutely must not be done is to give in to the temptation to inflate our way out of the debt crisis by depreciating the dollar and wiping out creditors wholesale. Yet there are disturbing signs that is direction in which policymakers are headed (O'Driscoll 2008b). If the Treasury and Fed do that, free markets will be euthanized.

The current crisis is surely a time to engage in constitutional reform of monetary policy and financial regulation. Inflation targeting as currently practiced must be up for reconsideration. Indeed, the commitment to "managed money" must be reconsidered. Monetary policy is governed by the rule of men, rather than the rule of law. The results are what public choice theory would predict and monetary history has documented: booms, busts, and panics.

Some form of a commodity standard has been the only proven way thus far conceived to impose lawful behavior on central banks (Steil 2007: 209–10). The classic argument for such a commodity standard (in recent history, a gold or silver standard) has been that commodities are costly to acquire and limit the growth of money. Commodity money also has an information content lacking in a fiat money system. The monetary commodity would be globally traded on financial markets 24/7. If, for instance, monetary policy were excessively easy, the price of the monetary commodity would rise relative to the conversion price and provide a real-time signal to the monetary authorities. That feature would address the repeated contention of Fed officials that they cannot know when a bubble is forming.

So the mix of options must include a return to a commodity standard. I am deliberately not specifying either the commodity or the form of the standard, so as to leave options open.⁷ The arguments of the free banking school also should be considered. Tinkering at the edges will give us more of the same.

There is no possibility of a reasonable solution to the current crisis, much less establishing policies to ensure it will not repeat, unless we understand why it happened. Then we can debate the contours of institutional and constitutional reform.

⁷One option might be a price rule including asset prices (O'Driscoll 2007, White 2007).

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