Alchemy Leveraged:
The Federal Reserve and Modern Finance
An Austrian Perspective on Dowd and Hutchinson

Roger W. Garrison

Kevin Dowd and Martin Hutchinson's *Alchemists of Loss: How Modern Finance and Government Regulation Crashed the Financial System* is a standout among a spate of books that deal with the origins of the worst financial crisis since the Great Depression. The strength of this book owes much to its attention to multiple time horizons. A perilous confluence of long-run trends, short-sighted regulatory schemes, monetary policy, and destabilizing investment strategies brought the economy to its knees. The book's subtitle features two key aspects of the story (Modern Finance and government regulation). The introductory chapter points a finger at Keynesian economics. Chapter 7 factors in the long-run trend away from "old partnerships" and toward "managerial capitalism," and Chapter 11, titled "Loose Money," gives due emphasis to the central bank's role in the episode.

The backgrounds of the authors make them well qualified to assemble the pieces of the puzzle in a revealing way. Kevin Dowd offers a classical liberal perspective on macroeconomic policy and specifically on central banking. His extensive writings on free banking (e.g., Dowd, 2000) suggest that a thorough *de*centralization of the banking business is essential to enduring macroeconomic stability. Martin Hutchinson is a seasoned investment banker turned financial journalist. His first-hand, nuts-and-bolts knowledge of twenty-first-century financial markets undergirds his broader perspective on Modern Finance.

Business Cycle Theories in Perspective

Dating from the earliest years of economics as a distinct discipline, there has been a special interest in the ups and downs of the economy. Thomas Malthus worried about economywide gluts that he believed to be characteristic of Adam

Smith's system of natural liberty. J. B. Say reasoned those worries away—to his own satisfaction and to that of many others. But business cycles persisted, and Karl Marx held that booms and busts of increasing severity are inherent in the capitalist system. Cyclical movements of various durations came to be associated with the names Joseph Kitchen (3-5 years), Clement Juglar (7-11 years), and Nikolai Kondratieff (45-60 years). And Joseph Schumpeter conceived of a composite cycle made up of Kitchen, Juglar, and Kondratieff components.

Ludwig von Mises ([1912] 1935) drew upon British and Swedish monetary theory, combined it with Austrian capital theory, and argued that business cycles are essentially monetary in origin. F. A. Hayek (e.g., 1935) developed the Austrian theory in the years just before the rise of Keynesianism. Monetary factors are causal, according to the Austrians, either in the sense of initiating an ultimately unsustainable boom or, if the initiating factor is newly perceived investment opportunities, in the sense of facilitating a protracted departure from sustainable growth. In typical episodes, as both Mises and Hayek came to recognize, monetary expansion is in play in both senses. The problem, however, is not the mere existence of a medium of exchange; money has long been seen by the Austrians and others as essential to the smooth functioning of a market economy. The problem is money as managed by a central bank.

It can justifiably be claimed that the Austrian theory of the business cycle represents a high-water mark—if not *the* high-water mark—in business cycle theory. Lamentably, Dowd and Hutchinson do not explicitly incorporate the Austrian theory into their own understanding of boom and bust or even mention this theory. Neither Mises nor Hayek appear in the book's index. Though many of the book's passages more-than-hint at an Austrian storyline, the authors rely explicitly on monetarist theory, which features the quantity theory of money (more accurately rendered as the quantity-of-money theory of the price level). Focusing on the money supply, the economy's total output, and the overall price level, Milton Friedman (for whom there are ten references in the book's index) reconstructed the quantity theory and gave it some empirical and political legs. Re-christened monetarism in the late 1960s, Friedman's macroeconomics demonstrated empirically that a monetary contraction can send a faltering economy into deep depression. And he eventually made some headway in the political arena on the basis of his proposed "monetary rule" to be observed by the central bank, about which, more later.

If the Austrian theory was the high-water mark of business cycle theory, then surely Keynesian theory, which prevailed over Austrian theory largely on political grounds, was the low-water mark. For Keynes, there are no viable market mechanisms that can keep the economy on a healthy course, macroeconomically speaking. Instead market economies are buffeted about by "animal spirits" that rule in the economy's investment sector and by fetish-driven hoarding behavior that robs money of its coordinating powers. Keynes's suggested long-run fix entails reforms in the direction of centralized economic decisionmaking. For the short run, Keynes argued for fiscal and monetary policies designed to stabilize an otherwise directionless and sometimes out-of-control market economy, allowing time for suitably-centralized institutions to be put in place. Dowd and Hutchinson rightly identify the enduring dominance of Keynes's short-run thinking as fundamental to our understanding of the last seven decades of macroeconomics history. In the policy arena, the anti-activist Austrian theory was understandably never embraced by central bankers, while monetarist thinking prevailed only fleetingly (*circa* 1979-1982) and in a degraded and politically corrupted form.

Theories of the business cycle put forth in their most general form, i.e., with the label "The *X* theory of *Y*," are often considered suspect or even rejected out of hand because of the mono-causality that such a labeling seems to imply. At the risk of oversimplification, we can say that the Austrian theory is a "Credit Expansion Theory of the Unsustainable Boom," and that the monetarist theory is a "Monetary Contraction Theory of Recession or Depression." These two very different theories reflect fundamentally different questions that the theories are intended to answer. In the context of the Great Depression, the Austrians asked, "how could the seemingly good times during the 1920s have gone bad?" Shifting their focus from the 1920s to the 1930s, the monetarists asked, "Why were the bad times experienced in the 1930s so awfully bad?"

The simplification here allows us to make a sharp distinction between Austrian and monetarist perspectives on business cycles. Actually applying either of these theories to a particular cyclical episode, however, requires a full accounting of the economic circumstances in which the episode occurs. In summary terms, we must recognize that centralized credit expansion turbo-charges whatever interest-sensitive activities are going on at the time. As my colleague Leland Yeager puts it, "each cyclical episode is a unique historical event." True enough, but my attention to the central bank as turbo-charger helps to keep separate the particulars and the commonalities of the different cyclical episodes.

Contemporaneous financial innovations and housing policy as well as the cumulative effects of long-run trends, such as in the redistribution of income and the structure of capital ownership, can be critical in explaining why the latest cyclical episode is worse than or different from earlier ones. The merits of *Alchemists of Loss* lie largely in the authors' account of these multifaceted circumstances that gave the 2008 financial crash its particular character.

In my judgment, and as will be explained in subsequent sections, the book could have been even more satisfying had it been based squarely and explicitly on the Austrian theory rather than on the monetarist theory.

A Long-Run Trend: Income Redistribution

The cumulative effect of income redistribution brought about by estate taxes and progressive income taxes dating from the Great Depression is integral to Dowd and Hutchinson's framing of the 2008 financial crisis. Over the past three quarters of a century, wealth has been siphoned from prominent business and industrial families and distributed to low-income households and others. Here the authors tell a credible story and with special attention to those particular "others" whose incomes have spiked in recent years. It is left to the reader to appreciate fully the heavy dose of irony in idea that the tax-driven downward redistribution of incomes has helped set the stage for a financial crisis.

The irony, of course, is that one of the most commonly held beliefs about the Great Depression is that the economy's poor performance was attributable, in large part, to a *market*-driven *upward* distribution of incomes. Having been influenced by the late nineteenth-century writer John A. Hobson, Keynes put some authority behind this idea. As output and incomes rise, the gap between consumer spending and income (i.e., saving) becomes increasingly difficult to fill with investment spending. This "spending gap" is all the more troublesome to the extent that income is increasingly skewed toward the wealthy, whose "marginal propensity to consume" is much lower than that of the wage earners. Though Keynes gave Hobson's idea some analytical legs, the supposed "maldistribution" of income had already become a prominent focus in popular writings, such as Frederick Lewis Allen's *Only Yesterday: An Informal History of the 1920s* (1931). It gained still more attention when coupled with Alvin Hansen's 1938 presidential address before the American Economic Association, in which he introduced what came to be called the "stagnation thesis." According to Hansen (1939), just as the saving-investment gap was widening, the possibilities for further technological advancement were dwindling. (Undoubtedly, the very notion of a yawning "gap" that somehow must be "filled" had rhetorical appeal for those who are favorably disposed to government intervention and collectivization.)

Even Henry Simons (1938, p. 18-19), seen at the time as a defender of *laissez faire*, claimed that "the case for drastic progression in taxation must be rested on the case against inequality—on the ethic or aesthetic judgment that the prevailing distribution of wealth and income reveals a degree (and/or kind) of inequality which is distinctly evil or unlovely." The idea that a government-engineered downward redistribution of income could in 70 years contribute importantly to a decidedly unlovely financial crash would not have occurred to those who took their cue from Keynes and Hansen or even from Simons.

As Dowd and Hutchinson make clear, the redistribution of wealth and income away from business and industrial families meant the demise of the "old partnerships" and the rise of "managerial capitalism." It meant the separation of ownership and control. In an earlier time and without the limited liability that virtually defines the modern corporation, the owners of large-scale industrial and business concerns had plenty of "skin in the game." They had a strong incentive to watch the bottom line, all things considered, and they were in it for the long run. Still, individual businesses, both large and small, could rise and fall with changing circumstances, but for the economy as a whole, the underlying concern for preserving capital value over the long run translated into a degree of macroeconomic stability. It is precisely this critical source of stability that has been continuously eroded over the years by the federal tax code and regulatory schemes.

So, with the atrophy of the partnership form of business enterprises, the incentives to maintain long-run profitability have been continuously weakened. It follows, almost as a corollary, that the window for exploiting short-run profit opportunities at the expense of long-run viability has been continuously widened. Managerial capitalism has given rise to a whole class of traders in securities markets and especially in derivatives markets who get in and out of markets in pursuit of short-run gains. The opportunity for these cumulative short-run gains would simply not have been available (or would have been available on a much smaller scale) had it not been for the absence of "old partnerships" whose vigilance and long-run perspective would have provided an effective counterbalance.

This aspect of Dowd and Hutchinson's storyline rings true. It is well known among economists (although Keynes had it backwards) that the economy's public sector is governed by short-run considerations, while the private sector is guided by the longer-run considerations. A similar contrast can be made between the nature of the incentives that dominate in a system of managerial capitalism (short-run) and the nature of those that govern in a system of "old partnerships" (long-run).

Further, Dowd and Hutchinson's insights about the significance of income redistribution dovetail nicely with the classical liberal—and libertarian—view of government intervention. More times than not, the actual consequence of the efforts of government to redistribute income is opposite to the supposed intentions. Though intended to stabilize the economy by narrowing the gap between consumption spending and income, it has actually contributed to the economy's *in*stability by giving more play to upper-level managers and traders, who have much shorter time horizons than do members of the old partnerships.

In this vein, the authors might have drawn support from Joseph Schumpeter. In dealing with the issue of tax-based income redistribution, he argued that the system of taxation should not violate "the organic conditions of a capitalist economy, including high premia on industrial success and all the other inequalities of income that may be required in order to make the capitalist engine work..." (Schumpeter, [1942] 1950, p. 384).

Critics of Dowd and Hutchinson might argue that their attention to the government's efforts to redistribute income is unwarranted because the economy's actual income distribution as measured, say, by the Gini coefficient has moved in the opposite direction, i.e., toward greater income inequality. (Since the late 1960s, the Gini coefficient has risen from 39 to 47, where zero represents complete income equality and 100 represents the opposite extreme.) But once again, Dowd and Hutchinson's insights conform with our general view of government regulation. In trying to redistribute income from high-income earners to low-income households, the government may have succeed only in redistributing income from investors who are in it for the long run to managers and traders who are in it for the short run. The primary beneficiaries of the redistribution is not the low-income households but rather the "others," mentioned earlier, i.e., the managers and traders whose astronomical bonuses help account for the upward movement in the Gini coefficient.

Dowd and Hutchinson's discussion of the trend toward shorter-run perspectives in the financial world is introduced with reference to the depression-era writings of Adolph A. Berle and Gardiner C. Means. The separation of ownership and control is seen by this hard-left duo as a major flaw in the capitalist system—here, as in hard-left literature generally, taking "the capitalist system" to be defined simply as "the existing system." But the nature of the problem of this separation is not lost on even the earliest defenders of capitalism. Dowd and Hutchinson (p. 140) quote from Adam Smith's *Wealth of Nations* to document his strongly negative view of joint-stock companies. With managers of other people's money in control, "[n]egligence and profusion must always prevail...." Here, Smith is focusing squarely on the joint-stock companies' incentive effects. In the early stages of the development of securities markets, these perverse-incentive effects may well have been a first-order problem.

Almost two centuries later, F. A. Hayek (1960, p. 319-320) focused on the knowledge problem and took a moderate view of the corporate form of ownership:

> Though there may be no difficulty in widely dispersing ownership of well-established enterprises among a large number of owners and having them run by managers in a position intermediate between that of an entrepreneur and that of a salaried employee, the building up of new enterprises is still and probably always will be done mainly by individuals controlling considerable resources. New developments, as a rule, will still have to be backed by a few persons intimately acquainted with particular opportunities; and it is certainly not to be wished that all future evolution should be dependent on the established financial and industrial corporations.

While not at all denying the perverse-incentives problem, Hayek is clearly concerned with the differences in the sorts of knowledge that is likely to be possessed by corporate managers and by owner-entrepreneurs. The corporate manager, being more nearly "the man on the spot," can act on the basis of his knowledge of the particular circumstances of time and place, but only the owner-entrepreneur can create a new enterprise or reset the direction of an old one on the basis of some vision of future economic conditions.

Modern Finance

Significantly, Hayek's moderate view of the separation of ownership and control pertains to a period during which securities markets were well developed but before the advent of "Modern Finance." Dowd and Hutchinson date the origins of Modern Finance to a theorem introduced in 1958 by Franco Modigliani and Merton Miller, demonstrating the underlying equivalence of debt financing and equity financing, and to a ground-breaking piece of work (a 1952 University of Chicago PhD dissertation) by Harry Markowitz that formalized the relationship between risk and rate of return. Modern Financial Theory became operational during the 1960s in the form of the Capital Asset Pricing Model (CAPM) and allowed for significant leveraging in the 1970s after Fischer Black and Myron Scholes extended the approach to the pricing of options. Still later developments in information technology and the strategic placement of computer hardware gave rise to flash trading, putting CAPM-based trading strategies on steroids.

We should recognize that, outside the context of booms and busts, Modern Financial Theory can be the basis for an overall gain to society. Apart from flash trading, which appears to have no socially redeeming features, trading on the basis of a comprehensive assessment of alternative investment portfolios allows the risks that are inherent in a market economy to be born by those who are most willing to bear them. Or, more generally, a risk/rate-of-return assessment can help tailor an investment portfolio to an individual's risk preferences. The problem, as Dowd and Hutchinson point out, is that the risks taken into account by the Capital Asset Pricing Model do not include *systemic* risks. The risk metric that was widely adopted in the 1990s, called "Value-at-Risk" (VaR for short) quantifies the riskiness of a particular portfolio—*on the assumption that the market as a whole is stable*. With this metric, you may assure yourself, for example, that you have a 95% chance that this portfolio will suffer no greater one-day loss than the calculated VaR (Dowd and Hutchinson, p. 113). But what if the market as a whole *is not* stable? And what if the use of the CAPM, the reliance on the VaR, and the proliferation of derivatives serve to leverage both short-run profits and the market's instability?

It is as if we were pondering a house of cards but focusing on only one particular card— this card being analogous to a particular investment portfolio. What are the chances that it will waffle or even fall—but without there being, either as cause or as effect, a collapse of the whole structure? In the context of structural stability, the CAPM can guide the owner of the portfolio to a short-run realized gain. And as short run follows short run, the gains are cumulative. As explained above, there can even be net gains to the economy, providing the

house of cards itself is stable. But employing the CAPM in the context of structural instability in the form of booms and busts is another story.

My reading of *Alchemists of Loss* suggests that the government's efforts to redistribute income downward and the consequent separation of ownership and control have degraded the overall performance of the economy and that practitioners of Modern Finance, operating in a cycle-prone economy, have taken full advantage of the separation, further degrading the economy's overall performance and redistributing income upward. Further, practitioners of Modern Finance, in taking advantage of booms, have added to the boom's strength and, with the help of still further government interventions, increased the boom's duration.

But Modern Finance isn't the cause of boom and bust. That all-too-familiar cyclical pattern of good times followed by bad predates Modern Finance by centuries and, even as a matter of the cycle's internal logic, has to be explained in terms of a more fundamental economywide disturbance. In the view of classical liberals, the market economy is not a house of cards. The economy is not inherently cycle-prone, but it can be rendered so by the centralization and politicization of the business of banking.

The Central Bank

Although Dowd and Hutchinson do not deal head-on with the Federal Reserve and its expansionary bias until Chapter 11 ("Loose Mone"Y), they clearly recognize that the Fed is fundamentally responsible for triggering and fueling artificial booms. In their Chapter 13 ("Bubble, Bust, and Panic") they write: "Monetary policy, *the principal institutional cause of the crisis*, has been neither improved nor reformed, and the highly dangerous policy of loose money has continued with a vengeance" (p. 322, *emphasis mine*). Together, Chapters 11 and 13 paint a vivid picture of boom and bust in which excessively low interest rates entice investors to increase their borrowing while encouraging would-be savers to consume instead (pp. 265-67). With saving and investment out of sync, the economy is driven off track in the upward direction and then eventually goes bust. In the aftermath the Federal Reserve, returning to its low-interest stance in an effort to hasten recovery, is more likely to treat the economy to still another unsustainable boom.

This is my reading—and, I suspect, many others' reading—of the authors' perspective on the role of the Fed. It rings true and underlies all the other aspects of their story. The one frustrating aspect of this book, mentioned earlier, is that the authors talk Hayek but cite Friedman. It was Ludwig von Mises and F. A. Hayek who emphasized the point that newly created money enters the economy through credit markets and impinges, in the first instance, on interest rates. The artificially lower interest rates distort the pattern of prices, misallocating resources in the direction of interest-rate-sensitive investments, such as early-stage production and durable capital (including housing). At the same time, the low rates induce overconsumption (the flip side of reduced saving). The eventual clash between the future-oriented investment spending and present-oriented consumption spending is what puts an end to the artificial boom—and reveals the significance of the fact that the VaR of Modern Finance does not take systemic risk into account.

By contrast, Milton Friedman saw these interest-rate effects as negligible. He trivialized any resource misallocations brought about by the Fed's monetary injections as "first-round effects"—i.e., effects that are reversed in short order by the market. His restatement of the quantity theory of money (Friedman, [1956] 1969) did entail a *pro forma* equation that included the interest rate but only as a minor variable affecting the demand for cash balances. That is, the interest rate played a marginal role on the money side—the left side—of the equation of exchange (MV=PQ), but no role at all on the output side. By contrast, the Austrians emphasized the interest-rate-induced allocation effects *within* Friedman's output aggregate. More specifically, a depressed interest rate induces—at the economy's peril—the overexpansion of the interest-rate-sensitive components of Q.

Even more significantly, Friedman has argued over the years that there is no empirically discernable relationship between booms and subsequent busts. Drawing on research that he had done nearly three decades earlier, Friedman (1993) reintroduced his "plucking model," which depicts the economy's total output as falling below trend (being "plucked" downward) at random intervals and to various degrees. To Friedman, this temporal pattern suggested a bust-boom sequence, which is to say, a contraction and subsequent recovery. He was wholly dismissive of the entire class of business cycle theories that treat boom and *subsequent* bust as a logical and chronological sequence. In a related interview (Hammond, 1992, p. 102), Friedman indicated that the lack of evidence for a supposed boom-bust sequence stands as a "decisive refutation of von Mises."

According to Friedman (1963, p. 296), the "twenties were, in the main, a period of high prosperity and stable economic growth." And as announced by the chapter title containing this claim, the twenties marked "The High Tide of the Reserve System." Friedman has shown little interest in the economics of the upper turning point that marked the end the 1920s expansion, focusing instead on the relationships that account for the subsequent descent into deep depression. His memoirs (Friedman and Friedman, 1998) are to the point. Summing up his and Anna Shwartz's study of the years 1929-1933, he wrote:

> We demonstrated ... that the Fed was largely responsible for converting what might have been a *garden-variety recession*, though perhaps a fairly severe one, into a major catastrophe (p. 233, *emphasis mine*).

For Friedman, the key question was, "How did a bad situation get worse?" He found that tracking the movements in the money supply (M), the price level (P), and total output (Q) to be useful in this regard. Those aggregates are not well suited for dealing with the pre-bust period. And changes in the temporal *pattern* of prices before the downturn (or after) did not figure importantly in his research.

My making the claim that Friedman's monetarism does not fit Dowd and Hutchinson's story probably warrants a short digression with attention to the standard textbook renditions of monetarism. What about the short-run/long-run Phillips curve analysis, commonly attributed to Milton Friedman (and, independently, to Edmund Phelps)? This business-cycle scenario is based largely on Friedman's presidential address at the 1967 American Economics Association (Friedman [1968] 1969), in which he details a boom-bust story. A booming economy moves north-westward along a downward-sloping short-run Phillips curve, increasing the inflation rate, reducing the unemployment rate below its "natural" level, and boosting output. Significantly, it is the increasing inflation rate, in textbook renditions of this Phillips-curve story, that causes the increase in employment—and hence in output. Employers are quick to take advantage of the easily perceived spread between the not-yet-increased wage rates and the inflated output prices. They hire more workers, bidding wage rates up, and produce more output. It is only later that the workers, who have for a time been supplying more labor for a higher *nominal* wage rate, realize that their *real* wage rate has actually fallen. They then withdraw the inflation-induced increment of the labor supply, and the unemployment rate reverts to its "natural" level. The reversion constitutes the bust and leaves the inflated economy at its pre-boom level of employment and output. Pointing to the rise of prices and nominal wages and the rise and fall of employment, and output, Friedman argues that the *long-run* Phillips curve is actually vertical; inflation can affect the economy's real variables only on a temporary basis.

Textbook writers and even many self-identified monetarists have taken this short-run/long-run Phillips curve analysis to be the monetarists account of the market mechanisms that cause a money-induced boom to go bust. Much more plausibly, however, Friedman's presidential address was intended only as immanent criticism of the views of his Keynesian-oriented contemporaries. The Keynes-inspired downward-sloping Phillips curve was seen by many as an enduring trade-off between inflation and unemployment, a virtual menu of policy choice with left-leaning politicians willing to put up with inflation in order to reduce unemployment and right-leaning politicians willing to put up with unemployment in order to reduce inflation. Friedman's message was simply that there is no long-run trade-off.

The common textbook rendition of the short-run Phillips curve dynamics actually clashes both with the empirical record and with a fundamental proposition of monetarism. The low unemployment rate during the boom depends on wage rates lagging behind rising output prices. This sequence would mean that *real* wage rates are relatively low during the boom. But the notion of low real wages during credit-induced booms has no empirical support. (In the Austrian view, the artificially cheap credit increases investment, increases the demand for labor and hence increases the real wage rate. In fact, it is in large part these higher real wages that makes credit-induced booms politically popular.)

Not long after he offered his criticism of the Phillips curve as a menu of choice, Friedman (1970) set out ten fundamental propositions of monetarism, which included the proposition that a monetary expansion caused quantities (output, and, as a virtual prerequisite, employment) to increase *first* and prices only *later*. With this sequence, of course, it cannot be the rising prices that, being differentially perceived by employers and employees, are responsible for increased employment and output. Friedman actually finessed the issue of quantities-then-prices vs. prices-then-quantities in his presidential address, portraying the latter as an extra boost during a later phase of the adjustment process. But it was exclusively the prices-then-quantities sequence that became the standard textbook version and that was formalized by Robert E. Lucas, Jr. as a monetary misperception theory of the business cycle. In any case, the quantities-then-prices understanding, which Friedman favored, is evidently not strong enough to show up in his highly aggregative monetarist framework as an empirically verifiable boom-bust sequence.

The Housing Bubble

Piecing together material from early and late chapters, we see that the federal government's push toward more widespread home ownership, especially among lower-income families, is a long-term trend with a twenty-first-century crescendo. Dating from Hoover's "Own Your Own Home" campaign (p. 185) and Roosevelt's National Housing Act of 1934, which created the Federal Savings and Loan Insurance Corporation, home ownership has been artificially—politically—favored. Fannie Mae (1938) and then Freddie Mac (1970) with their *de facto* loan guarantees, became the heavy lifters. During the Carter administration, mortgage lending was deliberately extended in the direction of low-income, high-risk borrowers by the Community Reinvestment Act (1977), a critical piece of legislation that was strengthened in 1985 and again in 1999. During the G. W. Bush administration, federal guidelines on mortgage-lending practices were further relaxed (allowing teaser loans and no down payments), and the gates were opened wide even to those with the shakiest credit histories. Compounded by the ongoing development of the techniques of Modern Finance, the short-run profitability and long-run unsustainability of the housing market were leveraged to the hilt.

Unsound as these policies were, they were not the *principal* cause of the financial crisis. Again, Dowd and Hutchinson are right in identifying the

expansion-prone Federal Reserve as the principal institutional cause. Had the Federal Reserve provided no fuel for the boom, Federal housing policy, though perverse, would not have been unsustainable. The mortgage market would have had to compete with all other markets for the funds provided by savers. There would have been a continuing bias in favor of the mortgage market, and the ongoing rate of foreclosures would have been higher. House prices would have been higher (because houses and mortgage loans are complements), but they would not have been high and rising. Practitioners of Modern Finance would have paid due attention to the higher VaR, which could well have reflected the expectation of an ongoing higher foreclosure rate.

Conversely, had the federal government not enacted legislation and created institutions that rigged mortgage markets so as to increase home ownership, credit expansion by the Federal Reserve would nonetheless have created an artificial boom, which inevitably would have ended in a bust. Some of the overabundance of loanable funds would have found its way into the housing sector (because that sector is interest-rate sensitive), but without any legislative or regulatory bias towards that sector, the Fed-injected funds would also have found their way into other interest-sensitive sectors of the economy.

While Fannie, Freddie, and related federal legislation are not the principal cause of the crisis, they do account for the particular character of the preceding boom and hence for the particular character of the subsequent bust. "Boom" and "bubble" are often used interchangeably in the literature on business cycles. It may be preferable, however, to use "boom"—or more specifically "artificial boom"—to refer to the credit-induced simultaneous expansion to various degrees of different interest-sensitive sectors of the economy, and to use "bubble" to refer to the most dramatic manifestation of the artificial boom. Just which sector identifies itself as the bubble depends on the circumstances in which the credit expansion occurs. As indicted earlier, artificial booms entail a turbo-charging of whatever else is going on at the time.

The dot-com crisis of the 1990s occurred because there was a credit expansion during a time when technological innovations associated with the digital revolutions created a strong demand for investment funds in that sector. The housing crisis in 2008 occurred because there was a credit expansion during a time when the federal government was pushing hard towards increased home ownership for low-income families. Understandably, we identify these different cyclical episodes (the dot-com crisis, the housing crisis) with "what was going on at the time." The common denominator, however, is the Federal Reserve and its propensity toward loose money.

At this point we might ask, "Will the real Alchemist please stand up?" Dowd and Hutchinson identify the Alchemists as the architects of Modern Finance. An Appendix to their Chapter 4 ("Theoretical Foundations of Modern Finance") profiles eleven "Leading Financial Alchemists," including Franco Modigliani and Merton Miller, who argued the irrelevance of the debt-equity structure, Harry Markowitz, who wrenched Modern Portfolio Theory into existence, and Myron T. Scholes, Fischer Black, and Robert Merton, who devised and refined an options valuation equation.

But surely, the true Alchemist is the Federal Reserve. It doesn't turn lead into gold, but with gold out of the picture, it turns nothing-at-all into money for lending. Its credit expansion is the *sine qua non* of the unsustainable boom. In this light, we see that the practitioners of Modern Finance are engaged in leveraging alchemy and that the architects of Modern Finance are credited for inventing the lever.

Blueprints for Reform

In the penultimate chapter Dowd and Hutchinson present "A Blueprint for Reform"—in one key instance, offering alternative, second-best measures in implicit recognition that sweeping reforms at the most fundamental level lack political feasibility. Adopting nineteenth-century financial systems as their model, they recommend abolishing the "big financial regulatory bodies," such as the SEC and the FDIC, and the big mortgage-loan guarantors, Fannie Mae and Freddie Mac. On these fronts, they offer no second-best measures.

For dealing with our cycle-prone monetary institution, however, they offer two levels of reform. Their first-best proposal is refreshingly radical and consistent with the overall spirit of the book. It obviously reflects the extensive work that Dowd (e.g., 2000) has done on the theory and practice of free banking:

> Our first choice environment is one with a commodity standard, free banking (no central bank) and financial laissez-faire, restrictions on the use of the 'limited liability' corporate form, and the most limited government (p. 390).

This bold recommendation is immediately followed by a brief segue to a much milder reform proposal—and one whose merits are questionable not only for being so mild (relative to their first-best) but also for virtually guaranteeing further boom-bust episodes.

Currently, and according to its own mission statement, the Federal Reserve is to conduct "the nation's monetary policy by influencing the monetary and credit conditions in the economy in pursuit of maximum employment, stable prices, and moderate long-term interest rates." In practice "maximum employment" is taken to mean "full employment," which allows for 5 to 6 percent unemployment, and "stable prices" is taken to mean a 2 percent inflation rate. (Although the central bank has no policy tools for controlling *real* long-term interest rates, stable prices will keep the *nominal* long-term rates only moderately above the real long-term rates.)

Dowd and Hutchinson note that Fed Chairman Paul Volcker (1979-1987) managed the central bank as if it had only a single mission, namely, stable

prices. Volcker let the unemployment rate and interest rates do what they would and brought down the rate of monetary expansion, reducing the inflation rate from a double-digit level to the low single digits during the first few years of his tenure. Recognizing that credit for this feat goes to the man and not to the institution, Dowd and Hutchinson recommend "Volckerizing" the Federal Reserve by replacing its multiple objectives with "a single overriding objective: the formation of monetary policy to achieve and maintain stability of the general price level" (p. 391). And to increase the autonomy of the Fed, they recommend "removing the requirement for the Fed chairman to report personally to Congress," and "moving the Fed headquarters physically... [to] St. Louis, an agreeable, geographically central location and bastion of monetarism..." (pp. 391-92).

Volcker can rightly be seen as heroic relative to his predecessor G. William Miller (1978-1979), whose woefully misguided policies were responsible for the double-digit inflation of that period. But maintaining price stability, whether defined as 2 percent inflation or 0 percent inflation, is a one-size-fits-all policy that under commonly occurring circumstances can result in a boom-bust episode. The booms that occurred during the 1920s and during the 1990s can illustrate. Both of these decades saw genuine growth spurts. Innovations during the 1920s in chemicals, automobile production, home appliances, processed foods, and much else provided enhanced profit opportunities, which in turn increased the demand for business loans. Under a system of true laissez faire, the increased borrowing would have caused interest rates to rise, allocating the economy's limited investment funds, i.e., savings, to the most viable undertakings. And subsequently, the increased output would have put downward pressure on prices, resulting in a mildly decreasing price-level, which is simply the arithmetical result of particular prices falling in the face of changed market conditions. The absence of monetary expansion in the face of real economic growth entails a benign deflation (Selgin, 1997). In terms of the equation of exchange, $MV=PQ$, P would have fallen as Q rose. This outcome, however, was preempted by an "accommodating" Federal Reserve. Its credit expansion during the 1920s countered the upward pressure on interest rates, causing investment spending to be higher than the market itself, given the actual savings available for lending, would have allowed; and the new money lent into existence percolated through the economy, countering the downward pressure on prices. F. A. Hayek was more-than-skeptical about the Fed policy during the 1920s, which he referred to in the title of his uncompleted PhD dissertation as "an artificial stabilization of purchasing power" (as quoted by Kresge, 1994, p. 7), and in a related article Hayek ([1925] 1994, p. 20) warned against "the proposal for a pure stabilization of the price level," i.e., against "Volckerization." Maintaining price-level stability required credit expansion, turbo-charging the genuine boom, and causing the "Roaring '20s" to have a substantially louder roar than was justified by the underlying economic realities. This account of that boom-bust episode, which draws from the Austrian theory and not from the monetarist theory, is nonetheless consistent with Dowd and Hutchinson's understanding of how a credit expansion leads to a bust.

The same was true for the 1990s, a decade during which the digital revolution and widespread use of the internet sparked an investment boom. In part, the boom was real. But, as in the 1920, the upward pressure on interest rates attributable to higher investment demand was countered by the downward pressure exerted by credit expansion. With market forces and credit expansion putting opposing forces on both interest rates and the inflation rate, unemployment fell below its natural rate without other macroeconomic metrics experiencing much change. Hailed as the "New Economy," meaning that credit expansion did not lead to price-level inflation, the decade was just another episode in which the Federal Reserve overrode the market forces that would have produced a mild price-level deflation. Paralleling the 1920s' experience, the underlying genuine dot-com boom turbo-charged by credit expansion eventually ended in the dot-com bust.

The lead-up to the 2007-2009 recession presents us with an interesting variation on a theme. The unique aspect of this boom-bust episode involves the nature of the non-monetary aspect of the boom and the resulting movements of interest rates. Rather than there being an underlying genuine boom, there was an underlying housing-market distortion—directly attributable to Fannie Mae, Freddie Mac, and home-buyer-friendly legislation and federal guidelines on mortgage lending. So, unlike the episodes of the 1920s and 1990s, interest rates in this latest episode were affected on the loan market's supply side. The risk component of mortgage lending rates was artificially reduced (i.e., transferred to the public at large) by loan-market intermediaries, making risk-adjusted mortgage loans artificially cheap. By itself, this intervention would have drawn investment funds away from other sectors of the economy into the housing sector. Had the Federal Reserve not expanded credit in this circumstance, the distortion of credit allocation and resource allocation would have been limited—not to say made trivial—by the market. There would have been, in many cases, a significant redistribution effect from the public at large to home buyers, and, in other cases and depending on the particulars of the mortgage contracts, there would have been foreclosures, undoubtedly with some spillover effects.

The fact that the Greenspan Fed adopted a loose money stance in the wake of the dot-com bust and well into this century's first decade was a game changer. The accommodation freed the housing sector from having to draw investment funds from other sectors. It fueled an economywide boom—the housing bubble, leveraged by the practitioners of Modern Finance, being the most dramatic aspect of it. In one important respect, the Federal Reserve found itself in uncharted waters. Rather than *countering* an *upward* pressure on interest rates, as detailed in the earlier episodes, it *compounded* the *downward* pressure. With interest rates at historic lows from mid-2003 to mid-2004, the mismatch between saving and the temporal pattern of investment was doubly strong. It was another

episode of turbo-charging, but this time it was primarily the ongoing distortion of housing markets that were being turbo-charged. The boom's unsustainability could not have been in doubt in the eyes of those who adopted an Austrian view. And the fact that the bubble was doubly artificial provided a strong hint about the difficulties inherent in the subsequent recovery.

A Volckerized Fed would not have served the economy well during this most recent boom. The relatively mild rate of inflation was consistent with an unemployment rate that fell to sub-natural-rate levels (i.e., below 5 percent in the final throes of the boom) and a corresponding high level of output. A Fed chairman whose exclusive focus was on price stability could only remain agnostic about a coming downturn, claiming lamely, as Greenspan repeatedly did, that you don't know you're in a bubble economy until the bubble bursts.
What's more, Volckerization could not have been achieved in this most recent episode by Friedman's Monetary Rule, according to which the growth rate of the money supply should be fixed at some low single-digit value. Such a rule would require that there be a meaningful money-supply target, such as M1 or M2, at which the Fed could take aim, and a predictable relationship between the targeted money-supply aggregate and the price level. Volcker himself was the last Fed chairman who enjoyed that circumstance. After the implementation of the Depository Institutions and Monetary Control Act (DIDMCA) of 1980, the meaningfulness of the various M's and the predictability of the M-P relationship began to fade—and were gone by 1987 when Greenspan assumed the chairmanship. Hence, even if Greenspan had asked, "What Would Volcker Do?," he could not have gotten an answer that could be applied to his own circumstances.

Neither could the Greenspan Fed have achieved a low inflation rate directly by adopting the price level itself as its target. The feedback about hits and misses would have occurred with much too long a lag to make that strategy viable. During Greenspan's tenure, the actual sequence of policy moves evolved into an implicit interest-rate rule that took into account both expected inflation and the unemployment rate. Adherence to the so-called Taylor Rule (a quantified latter-day Keynesian Rule) continued until mid-2003 when the excessively low interest rates (even by the Taylor Rule standard) and escalating real estate prices removed all doubt about the boom's unsustainability.

A Summary View

Dowd and Hutchinson's narrative is built around the idea that loose-money booms lead to busts. That very idea makes their arguments Austrian-centric rather that monetarist-centric. Friedman offers his plucking model as evidence that the dominant sequence borne out by the data is a bust-boom sequence rather than boom-bust sequence.

Time and again, Dowd and Hutchinson point to downwardly distorted interest rates and long-term investments as key to our understanding of the perverse effects of loose money. This, of course, is the Austrian emphasis. Friedman downplays allocation effects of the rate of interest, and casts the interest rate in a minor role affecting the demand for money.

Dowd and Hutchinson see the loose-money policies of the Greenspan Fed as an essential element in the story of the housing-led boom and subsequent financial crisis. On the occasion of Greenspan's retirement from the Federal Reserve, Friedman penned a piece for the *Wall Street Journal* with the title, "He Has Set the Standard." Evidently, the very fact that Greenspan's reign had seen only mild inflation was enough for Friedman, despite the absence of a viable Monetary Rule, to credit him for doing the right thing.

A recognition by Dowd and Hutchinson that their analysis is more Austrian than monetarist may have led them to omit the call for Volckerization and for a move to St. Louis. And their sound judgment that the central bank is the principal institutional cause of booms and busts should have led them to stick with their first-best recommendation of monetary decentralization.

Roger W. Garrison is professor of economics at Auburn University, Auburn, Alabama. He thanks John Cochran, Thomas McQuade, George Selgin, and Lawrence White for comments on an earlier draft.

References

Allan, Frederick Lewis. 1931. *Only Yesterday: An Informal History of the 1920s*. New York: Harper and Brothers.

Berle, Adolph A., Jr., and Gardiner C. Means. 1932. *The Modern Corporation and Private Property*. Macmillan.

Dowd, Kevin. 2000. *Money and the Market: Essays on Free Banking*. London and New York: Routledge.

Dowd, Kevin, and Martin Hutchinson. 2010. *Alchemists of Loss: How Modern Finance and Government Regulation Crashed the Financial System*. Chichester, West Sussex, UK: Wiley & Son, Ltd.

Friedman, Milton. [1956] 1969. "The Quantity Theory of Money: A Restatement." In Friedman. *The Optimum Quantity of Money and Other Essays*. Chicago: Aldine Publishing Company. 51-67.

———. [1968] 1969. "The Role of Monetary Policy," in Friedman. *The Optimum Quantity of Money and Other Essays*. Chicago: Aldine Publishing Company. 95-110.

———. 1970. *The Counter-Revolution in Monetary Theory*. London: Institute for Economic Affairs.

———. 1993. "The 'Plucking Model' of Business Cycle Fluctuations Revisited." *Economic Inquiry*. 32(2) April: 171-77.

Friedman, Milton, and Rose D. Friedman. 1998. *Two Lucky People*. Chicago: University of Chicago Press.

Hammond, Daniel, J. 1992. "An Interview with Milton Friedman on Methodology." *The History of Economic Thought and Methodology* 10: 91-118.

Hansen, Alvin H. 1939. "Economic Progress and Declining Population Growth." *American Economic Review*. 29(1) March: 1-15.

Hayek, Friedrich A. [1935] 1967. *Prices and Production*, 2nd ed. New York: Augustus M. Kelley.

———. 1960. *The Constitution of Liberty*. Chicago: University of Chicago Press.

———. [1925] 1994. "The Monetary Policy of the United States after the Recovery from the 1920 Crisis." In F. A. Hayek, *Hayek on Hayek: An Autobiographical Dialogue*. Chicago: University of Chicago Press. 5-32

Kresge, Stephen. 1994. "Introduction." In F. A. Hayek. *Hayek on Hayek: An Autobiographical Dialogue*. Chicago: University of Chicago Press.

Mises, Ludwig von. [1912] 1953. *The Theory of Money and Credit*. New Haven, Conn.: Yale University Press.

Schumpeter, Joseph A. [1942] 1950. *Capitalism, Socialism and Democracy*. 3rd ed. New York: Harper and Row.

Selgin, George. 1997. *Less than Zero: The Case for a Falling Price Level in a Growing Economy*. London: Institute for Economic Affairs.

Simons, Henry C. 1938. *Personal Income Taxation*. Chicago: University of Chicago Press.