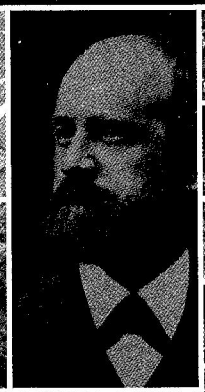
STUDIES IN
ECONOMIC REFORM
AND SOCIAL JUSTICE

After the Crash

Designing a Depression-Free Economy



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Brief Summary of the Present Crisis

THE CURRENT GLOBAL ECONOMIC CRISIS consists of a collapse of credit markets that are essential for the functioning of a modern market economy. Faced with a loss of equity capital, banks are reluctant to make ordinary business loans. Without credit, many businesses are facing bankruptcy and liquidation. That means a rising rate of unemployment, reduced personal spending levels, and declining business revenues. All of the factors that normally work together to create a vibrant economy (expanding credit, capital formation, rising incomes, and increased employment) have been working in reverse, causing a downward spiral of reduced capital investment and increases in business failure, personal bankruptcy, unemployment, poverty, and homelessness. On a collective level, we are facing the same problem as an individual who is "house-poor"—owning an asset that is not liquid, but unable to pay for daily needs. On a much larger scale, the nation and the world find themselves in that situation today.

The people to whom we turn as experts on economic matters have failed us, not because they have personal shortcomings, but because their theories do not provide the means of analyzing the sources of the present crisis adequately.

Most economists believe that a market economy is a self-correcting system, but they also assume it sometimes needs government assistance in recovering from a shock and regaining equilibrium. The only remedies most economists learned in the past century to correct disequilibrium were monetary (cutting interest rates to stimulate investment) and fiscal (running a government deficit to inject money into the economy directly). Those types of policies deal only with symptoms. To use a common hydraulic metaphor, the monetary and fiscal policy instruments favored by most economists are the equivalent of pumping more water through clogged pipes, without much interest in what caused them to clog in the first place. Because economists are largely indifferent to what causes economic flows to become restricted, they lack models about how to respond if conventional measures are ineffective—if the blast of water does not break up the obstruction,

so to speak. Thus, when we encounter a depression of the sort that now looms over us, the silence of most economists is deafening.

Economists commonly look for external events ("shocks") to explain the cause of sudden economic crises. In this case, however, the shock has come from inside the system. A financial bubble formed as investors bid up the price of U.S. housing by 73 percent from 1999 through 2006 (Federal Housing Finance Agency 2009: 48–50).[1] (There was considerable regional variation. In the Pacific region, prices climbed 143 percent over the same period, and much of the resulting crisis emerged from the Pacific.) Even as prices neared their peak in 2005, there were respected economists (Lereah 2005; Mandel 2004, 2005) who imagined that those prices could never come down. As Mandel (2005), chief economist at *Business Week*, put it, "the expected rise in housing prices makes housing investment effectively free (or even better)." As recently as September 2007, Christina Romer (2007: 2), the new chair of the Council of Economic Advisers, claimed that "better policy, particularly on the part of the Federal Reserve, is directly responsible for the low inflation and the *virtual disappearance of the business cycle* in the last 25 years" (emphasis added). Since Romer has been on the Business Cycle Dating Committee of the National Bureau of Economic Research, her dismissive attitude toward the present downturn reveals an amazing degree of myopia.

There is some confusion about what a real estate price bubble means. When real estate prices rise and fall, that actually represents a change in the price of the *land*, not the associated buildings. Unlike a building, land has no cost of reproduction, does not physically wear out, and is priced solely according to demand. The equilibrium price of any parcel of land is based on the discounted flow of net revenue in its highest and best use, but, as recent experience attests, prices in a bubble can rise above that level based on expectations, and they can fall below that level in the period of retrenchment. Preventing these bubbles and the reduction in productive activity they cause in their aftermath is (or should be) one of the aims of economic policy.

Since the 1970s, mortgages have been increasingly bundled and securitized—turned into derivatives called mortgage-backed securities (MBSs) or collateralized mortgage obligations, which can be combined into standardized units and sold as bonds. As of 2008, $6.6 trillion in mortgages were held in the form of MBSs and only $4.4 trillion were held by banks, savings and loans, and other institutions that held the mortgages on their own books (Board of Governors of the Federal Reserve System 2009: Table L.218). Originating lenders thought they had nothing to worry about. They passed along the risk to others—the investment banks on Wall Street. The investment bankers thought they were secured against defaults because they bought insurance called credit default swaps. The giant insurance company, AIG, was the primary issuer of credit default swaps. Based on those assurances, brokers were able to sell these derivatives to banks around the world.

What few noticed was that the whole securitization process was like an inverted pyramid: a large network of financial transactions resting on a small base of mortgages (small in the sense that the derived instruments were highly leveraged). The derivatives turned "toxic" for two reasons: (1) because, in many parts of the country, *all* real estate was becoming overpriced (high ratio of price to imputed cashflow) in a growing bubble; and (2) because the rising price of housing induced banks to issue mortgages with faulty underlying fundamentals. The whole system of real estate lending rested on unrealistic future expectations that households could pay off adjustable rate mortgages (ARMs) when interest rates rose or that they could refinance when a balloon payment came due. According to the Mortgage Bankers Association (2007), subprime loans, which were issued to households that did not meet normal banking standards for ability to pay, were a disproportionate share of subsequent defaults, about 7 percent of mortgage loans outstanding, but 43 percent of the foreclosures started in late 2007. The delinquency rate on subprime ARMs rose from less than 6 percent in 2005 to 25 percent in May 2008 (Bernanke 2007, 2008).

It is, however, a mistake to blame the bubble on subprime lending. The expansion of subprime lending took place mostly in 2005 and 2006, *after* five or more years of dramatic residential price increases, so it was merely a magnifier, not a primary cause, of the mortgage crisis (Federal Housing Finance Agency 2009: 48ff). According to Harvard's Joint Center for Housing Studies (2008: 39, Table A-6), the share of mortgage originations that were subprime rose from less than 8 percent in 2001–2003 to 20 percent in 2005 and 2006. The explosion

of subprime loans occurred *after* the homeownership rate had peaked in 2004 and was starting to decline (Joint Center 2008: 4).

The primary cause of the bubble was the allure of speculative gain—the fantastic idea, which periodically grips entire societies for a few years, that it is indefinitely possible to create wealth out of nothing by simply buying land (plus associated buildings) and then reselling for a higher price. Speculative bubbles, by their nature, cannot be sustained because they produce no new value. Cash drains and a fear of rising interest rates eventually cause land prices to grow more slowly and then level off, followed by a steep decline, leaving late buyers with negative equity—property worth less than the loan.

In the current cycle, the air began leaking from the bubble at the end of 2005 or early 2006.[2] As housing prices fell and balloon payments came due on loans worth more than the property, a trickle of defaults turned into a flood, rising from 1.2 percent in 2006, to 2.0 percent in 2007, to 3.3 percent in 2008.[3]

The rise of foreclosures and the decline in housing prices set in motion a cascade of financial calamities. Investment banks were highly leveraged. From 1997 until 2004 (and again after August 2008), their leverage (debt to liquid asset ratio) was limited to 15 to 1. But in April 2004, the Securities and Exchange Commission authorized large investment banks to set leverage ratios according to their own risk management models (Spaulding 2008). The ratio at Bear Stearns rose to 33 to 1 before it became insolvent and its assets were transferred in March 2008 to JPMorgan. With that sort of leverage, a loss of only 4 percent caused them to become insolvent. Merrill Lynch and Lehman Brothers also failed in September 2008, as did Fannie Mae and Freddie Mac, the two largest holders of mortgage-backed securities. As the dominos fell, the self-corrective elements of the economy were not in sight.

Although the media have focused on the financial sector and the dangers of insolvency, the fallout from the mortgage meltdown has been felt throughout the economy. The unemployment rate has increased by 75 percent, from a decade average of 4.9 percent (1998–2007) (U.S. Council of Economic Advisers 2009: Table B-42) to 8.6 percent in April 2009 (U.S. Department of Labor, Bureau of Labor Statistics 2009). Housing starts have declined by 79 percent, from an average of 375,000 in each of the first quarters of 2005 and 2006 to 78,000 in the first quarter of 2009 (U.S. Department of Commerce, Bureau of the Census 2009). The suicide of David Kellermann, the acting CFO of Freddie Mac, on April 22, 2009, was a shocking reminder of the potential rise in similar deaths during the current economic crisis (Desmon and Calvert 2009).[4] The suicide rate during the 1930s Depression climbed about 25 percent above the level of the 1920s (U.S. Department of Commerce, Bureau of the Census 1975: Series B-166).

The entire economy, not only in the United States but in much of the world, has been pulled into the vortex of tightening credit as a result of mortgage delinquencies and foreclosures and the corresponding loss of bank assets. The most astonishing feature of the crisis is how localized its sources were. Just four states—Nevada, California, Arizona, and Florida—accounted for 47 percent of foreclosure filings and 42 percent of foreclosure starts in the first quarter of 2008 (Rismedia 2008). Those four states also accounted for 89 percent of the increase in foreclosures in the second quarter of 2008, according to the Mortgage Bankers Association (York and Vintner 2008).[5] More than half of the foreclosures in 2008 took place in just 35 counties, with just eight counties in four states accounting for 25 percent of all foreclosure filings (Cutts 2009). The land speculation mania was not a uniform national problem. Yet it has affected the entire world through its influence on the banking system.

The same real estate speculation that has weakened the U.S. economy has operated in many other countries as well. It has affected most industrial countries, except Japan and Germany (Montagu-Pollock 2009).[6] In 13 countries, house-price appreciation from 2000 through 2007 was 40–70 percent. In nine countries, the rise was 75–100 percent. In four countries, house prices rose from 140–300 percent. Including bubbles that started in the 1990s, there were eight additional countries in which house-price appreciation exceed 100 percent. In Ireland, for example, house prices rose 314 percent from 1996 to 2007 (about 100 percent from 2000 to 2007) (Duffy 2009).[7] From 1997 through 2005, house prices rose about 150 percent in England and Wales (Academetrics 2009). This global experience should alert analysts in the United States that this phenomenon cannot be explained in terms of particular events in the United States, such as subprime mortgages or changing demographics.

One gloomy factor on the horizon, which has received very little attention during the present crisis, is that land or real estate booms often consist of two waves, the second one peaking about two years after the first one. In this case, gross investment in residential construction began to fall after the fourth quarter of 2005, and it has declined about 52 percent from then until the first quarter of 2009 (U.S. Department of Commerce, Bureau of Economic Analysis 2009: Table 5.3.6, line 18). But gross investment in *nonresidential* construction (representing the second wave) continued growing 14 percent after January 2006, until it peaked in the second and third quarters of 2008, then fell 6 percent in the third quarter of 2008 and another 11 percent in the fourth quarter (U.S. Department of Commerce, Bureau of Economic Analysis 2009: Table 5.3.6, line 2).[8] Private business inventories also rose until the third quarter of 2006, remained constant until the first quarter of 2008, then fell by 3 percent by the first quarter of 2009 (U.S. Department of Commerce, Bureau of Economic Analysis 2009: Table 5.7.6b, line 1). In short, the consequences of the collapsing housing market were partially masked by sustained nonresidential investment and constant inventories in 2007 and part of 2008. Now that other investment is also falling rapidly, the crisis in 2009 and 2010 will be larger than the changes in the housing market alone would have indicated.

II

Inadequate Explanations of the Crisis

IT IS REMARKABLE that land price bubbles have been ignored by economists, who are certainly aware of them from both personal experience and anecdotal observation. Because land remains an obscure and insignificant feature in mainstream economic theories (which focus exclusively on labor and capital), those same theories cannot analytically account for recessions or depressions caused by real estate bubbles. As a result, when speculation does play a decisive role in economic events, the behavior of land markets is treated as an exogenous variable—an external shock that could not have been anticipated.

Shiller (2005, 2007) has come closer than other well-known economists to incorporating real estate speculation into a story of recent

economic events. Shiller's observations do not, however, amount to a theory. In the middle of a housing price bubble, he recognized it and foresaw that it would eventually come to an end. By contrast, David Lereah (2005), chief economist of the National Association of Realtors, wrote that the housing market would remain strong for a decade. Shiller's refutation of that idea was based on nothing more than the fact that historically all bubbles have burst.

Economists, thus, have no theory about the source of the crisis. Popular sentiment has blamed imprudent borrowing by low-income households, subprime mortgages, deregulation, the securitization of mortgages, high-risk lending by banks, financial fraud, exotic derivatives (such as credit default swaps), low interest rates from 2001 to 2004, and many other features of the current crisis that have been in the news. However, all of these explanations are ad hoc, not based on theory.

If economists and political leaders are ever to devise policies that will avoid severe contractions, they will need a predictive model, not ex post observations about the features of the immediate crisis. Until such a theory of how land bubbles form is developed, historical patterns will have to serve as the best guide. Shiller (2005) criticizes ad hoc explanations of the current housing price boom and bust, such as demographic pressure, low interest rates, and deregulation, by pointing out that those factors have existed at various times without causing a land price bubble. Yet Shiller's own analysis is ahistorical. He exhibits no familiarity with the literature of the 1930s on how real estate speculation and bank lending practices created the conditions for the Great Depression.[9] Nor does Shiller show any awareness of a more recent literature (Foldvary 1997, 1998, 2007; Harrison 1983, 1997, 2005) based in part on the work of Henry George ([1879] 1979: 263–281), who provided a conceptual framework more than a century ago for understanding the main cause of depressions in terms of land speculation.[10] That Shiller neglects George's contribution comes as no surprise, since Shiller's method is to look for the psychological roots of economic behavior rather than structural causes. When Shiller (2008) considers methods of preventing future bubbles, his solutions all lie in the domain of psychology and education—training households to be better shoppers. He asserts that prevention lies in better

consumer education to help home buyers make better decisions. He does not analyze the kinds of faulty incentives that might bring about systemic failure.

III

Excessive Reliance on Financial Analysis of Crises

ALTHOUGH ROBERT SHILLER has offered no structural analysis of the patterns associated with speculative bubbles in real estate, he has at least recognized that land plays a powerful role in shaping economic conditions. That is preferable to the many economic studies that treat economic crises as the result solely of financial transactions.[11]

In recent decades, when developed nations have had relatively stable economies, economists have focused their attention on the crises affecting developing countries or regions such as Mexico, Brazil, and Southeast Asia. The standard explanation for all of these crises has been framed in terms of capital flows and exchange rates. According to this conventional understanding, financial liberalization has allowed capital to flow freely into a country such as Mexico or Thailand. The sudden increase in capital produces a "financial" bubble, with rising "asset" values. When the bubble bursts, asset prices fall, bankruptcies proliferate, and the invested capital quickly flows out, causing currency depreciation, and rising import costs. The result is a recession or depression.

Both Joseph Stiglitz and Paul Krugman have written extensively about economic crises in developing nations and have hinted that real estate bubbles could be a significant part of this highly disruptive process, but neither has made that point explicitly. Each prefers to trace the origins of economic disasters to financial deregulation, moral hazard, and flaws in international finance.[12] In so doing, these activist scholars have overlooked the semi-autonomous role of land speculation as a systemic source of financial instability. For example, Stiglitz and Uy (1996: 259), in an article examining the sources of "financial crises" in East Asia, make reference to real estate lending or speculation as one element in their list of recent crises. (In the case of Japan in 1991, they refer to the primary cause as "[e]xcessive exposure to real estate lending (90 percent of bad loans), and a steep decline in

real estate prices.") This factor appears to be merely anecdotal, of no analytic significance for them. In another article, Stiglitz (1996: 157) recognizes that banking regulations should limit lending for real estate: "[Discouraging] the allocation of capital to areas such as real estate meant that more capital was available for areas with higher technological benefits, such as plants and equipment." But a passing comment such as that does not translate into a recognition of the role of real estate in propagating the financial crises. Instead, Stiglitz's analytic variables are all financial.

Paul Krugman (1998) similarly recognizes that land prices are the stuff of which "asset price" bubbles are formed, but he insists that the cause lies in the banking system. Referring to the 1997 Asian crisis, he says:

> The first act was the story of the bubble. It began, we now think, with bad banking. . . . All those irresponsible loans created a boom in real estate and stock markets, which made the balance sheets of banks and their clients look much healthier than they were.

Krugman does not explore the obvious possibility that the bubble begins with real estate and entices banks to expand their balance sheets. In that alternative story, money flows into a country precisely because a real estate boom already exists, and investors are hoping to profit from it. For Krugman, causality always begins with banking and runs toward real transactions, not the other way around.

A more sustained recognition by a finance-oriented economist of land's role in economic crises is an exploration by Gabriel Palma (2000) of regional economic crises in the 1990s. Since the paper is on the need for capital controls, the problem of land price bubbles is a secondary or tertiary issue. Nevertheless, Palma provides detailed evidence of a connection between real estate bubbles and subsequent economic collapse in Chile, Mexico, and Malaysia. In Mexico, before the 1994 crisis, there was a 600 percent increase in real estate prices and a 100 percent increase in residential construction over five years, while investments in machinery, equipment, and infrastructure fell by over 50 percent (Palma 2000: 19, 21). In Chile, there was a 900 percent increase in a real estate price index in six years (Palma 2000: 41). In Malaysia, there was a 350 percent increase in real estate prices from 1992 to 1997 (Palma 2000: 47–48). In each case, the rapid climb in

land prices was followed by a precipitous fall that left banks with nonperforming loans and "toxic assets" (to use the term popularized in the United States). The fact that Palma does not integrate these facts into the analysis is perhaps less important than the evidence he provides that real estate bubbles are in some way linked to crises.

IV

Do Monetary and Fiscal Remedies Still Work?

BECAUSE ECONOMISTS TREAT rapid changes in real estate prices as an epiphenomenon, not a causal factor in economic crises, their remedies do not take land speculation into account. Instead, they concentrate exclusively on solutions that are aimed at changing financial flows. Ultimately, their ideas can all be traced back to hydraulic metaphors. When an economy slows down, conventional economic wisdom says that something is clogging the pipes. The remedy lies in blasting water (money) through the pipes to enable them to flow freely again. The conventional responses to crisis by mainstream macroeconomists are (1) to cut interest rates to promote investment or (2) to run a fiscal deficit.

Recently, however, the economists who favor these conventional therapies are having doubts. In the wake of the Asian financial crisis of 1997–1998, Paul Krugman (1999) concluded that traditional fiscal and monetary policies were no longer effective in fighting economic contraction in the wake of speculative attacks against a currency.[13] When developing nations (such as Mexico or Thailand) are forced to devalue their currencies by a small amount, the predicted result is an inflow of capital to buy the devalued currency. However, in recent experience, the result has been a continuous fall in the value of that currency. Even as a nation slips into recession, it may be forced to defend its currency by raising interest rates to extremely high levels (50 to 70 percent in some cases). That prevents the use of monetary policy to fight deflation. At the same time, capital flight prevents the use of deficit spending to "prime the pump." Deflationary policies destroy small businesses and increase unemployment rates during the recession. This experience has raised serious questions about the efficacy of demand management tools. As Krugman (1999: 58) himself observes:

> The truth is that the world economy poses more dangers than we had imagined. Problems we thought we knew how to cure have once again become intractable, like temporarily suppressed bacteria that eventually evolve a resistance to antibiotics. More specifically, the problem of aggregate demand, of getting people to spend enough to employ the economy's productive capacity, is not, as we might have thought, always a problem with an easy solution.

The limits of demand management in dealing with economic instability apply also to mature economies. Japan has found itself in a liquidity trap since 1991. (A liquidity trap means that the central bank is lending at a near-zero interest rate, and yet that fails to stimulate investment. In other words, monetary policy is powerless.) Fiscal policy has also provided no relief. "Japan's experience shows how hard it can be, once in such a trap, to get out again" (Krugman 1999: 70). Japan may not be a special case. Krugman (1999: 69) suggests that other nations face the same threat:

> Are other advanced countries at any risk of finding themselves in the same situation? The conventional answer is no, that Japan's problems are uniquely severe. But ten or even five years ago few economists would have taken seriously the possibility that Japan could be in its present predicament, and thus the emergence of liquidity traps elsewhere is no longer inconceivable. Indeed, in the early 1990s some economists worried that the United States might be approaching liquidity-trap territory.

The early 1990s in the United States was a period much like the present one—a recession following a prolonged period of real estate speculation, in which housing prices climbed 33 percent from 1985 to 1989. (During a comparable length of time in the present boom and bust, from 2002 through 2006, housing prices rose 46 percent (Federal Housing Finance Agency 2009: 48ff).) In 1990–1991, the United States avoided a liquidity trap and recovered, perhaps because real estate prices merely leveled off for a few years before climbing again.[14] Because his economic models do not take variations in land prices into account, Krugman (1999: 69) attributed the 1990–1991 recession to "a slump in consumer spending together with financial difficulties in the banking sector," completely ignoring the rise and flattening of home prices that preceded the slump.

Standard remedies have failed to restore economies going through "financial crises" for one fundamental reason: they do not deal with the sources of the crisis in the real economy. When investment flows into land speculation, and investment in productive business activity slows as a consequence, no amount of financial manipulation can compensate for that misallocation of resources.

V

Taking Real Estate (Land) Seriously

DEMAND MANAGEMENT—whether monetary or fiscal—has lost much of its efficacy, at least during crises. By the admission of Paul Krugman, one leading proponent of demand management, economies are not responding to the old medicine the way they are supposed to. Having said that, he does not tell us where else to turn.

The search for a theory that would explain the causal mechanisms behind periodic economic crises must take real estate seriously. (By "real estate," I mean the land or sites that rise in value with increased demand, and only secondarily the buildings on them.) Since economists such as Shiller, Krugman, and Stiglitz have already included real estate as an intermediate factor in booms followed by destructive busts, the key question is not whether real estate is involved in economic crises. The question that needs to be addressed is whether real estate speculation is the *central cause* of those crises. In simplified form, the issue is whether causality flows primarily from real estate bubbles to banking or vice versa. They almost certainly interact, but, for economists, the question should be where the core of the problem lies. For policymakers, the issue is whether bank regulation or land-value taxation is the more effective means of limiting speculative bubbles.

This is not the place to present the evidence on those questions. For the sake of brevity, I would simply point out that capital inflows were not a necessary or sufficient condition for 19th-century land booms, which were also followed by bank panics and depressions. In addition, there are current cases in which real estate bubbles developed independently of an unusual influx of foreign capital, such as Mumbai, Ireland, and Spain in recent years.[15] The banking system must always be complicit in land price bubbles, but the international flow of "hot money" in pursuit of real estate investment opportunities is merely an accident of present circumstances, not a general feature of the enduring pattern of bubbles. The problems created by booms and busts in real estate must be directly addressed with policies related to land prices and the association of capital investment with land speculation. The instability created by those investment patterns will never be adequately addressed through reform of the financial system alone.

VI

The Distinctive Contributions of Mason Gaffney

THE ESSAYS IN THIS VOLUME by Mason Gaffney offer a way of understanding the roots of instability in capitalist economies from a new vantage point. Rather than starting his analysis with recorded financial transactions as the most basic elements of macroeconomics, Gaffney begins with overlooked distinctions among actual transactions, some of which enhance productivity, while others diminish it. By differentiating land from capital, and durable capital from working capital, Gaffney shows how these elementary distinctions can be used to reframe the organization of economic life.

In Chapter 1, Gaffney argues that the current economic crisis is not new. He observes that the current crisis arose through a cycle similar to one that has been repeated many times in the past.[16] He builds on the insights of Henry George, who attributed depressions to land speculation, but Gaffney goes beyond George by adding a capital theory. Gaffney reveals why land speculation is a necessary, but not sufficient, explanation of how credit-based economies suddenly seize up.

Chapter 1 lays out the steps by which land speculation biases capital investment by encouraging premature development and excessive public spending on infrastructure, leading to collapse.[17] During the inevitable contraction phase, when land prices decline, many banks that lent money for real estate during the upswing become insolvent or at least unable to lend money, even for prudent projects. The resulting severe contraction of credit leads to higher unemployment and a period of negative growth (recession or depression).

This process of overexpansion followed by calamitous contraction—which Gaffney reminds us occurs on an approximately

18-year cycle—is not a fact of nature that must be endured.[18] Instead, Gaffney argues the cycle can be mitigated, or avoided entirely, with one simple expedient—by making effective use of the property tax. Part of the remedy lies in shifting the primary burden of the property tax to the portion that falls on land values. Unlike capital, land can be taxed without reducing the amount produced. In fact, a tax on land increases the efficiency of land use by improving the intensity, timing, and location of development. Gaffney explores the reasons for those nonrevenue benefits of taxing land in great detail. However, as he discusses further, the benefits of the property tax in defusing real estate price bubbles are limited by the frequency and accuracy of property assessment. Unless the assessor keeps pace with the speculator, this policy instrument is of little avail for avoiding wild swings in economic output.

In the second chapter, Gaffney extends his analysis to the more general problem of misallocation of capital. As the pattern unfolds, we can now see that the disequilibrium that produces booms and busts is a special case of a more pervasive pattern that weakens market economies. Gaffney reintroduces the concept, derived from Wicksell, of the "valence" of capital, a term that refers to the frequency with which capital turns over and interacts with labor. The rate of turnover of capital, the inverse of its payout period, is a measure of how hard capital works, somewhat like the concept of "velocity" applied to money.

Chapter 2 lays the groundwork for a new framework in macroeconomics. In this framework, the quantity of capital investment, so important in other aggregate economic models, is of limited relevance. Since about 75 percent of gross investment is required to offset depreciation in the stock of capital, the restraint shown by households and businesses by saving (i.e., not consuming) adds only about 2–3 percent to the net stock of capital.[19] The truly dynamic quality of capital lies in its capacity to employ labor, and that is related primarily to its turnover, not to the stock of capital or to net additions to the stock. Using capital turnover as the key to macroeconomic health, Gaffney shows how taxes on labor (and favoritism to capital in the tax code) send the wrong economic signals. They unintentionally encourage investment in durable capital with very slow turnover. Investments with long maturity have the unintended consequence of reducing

demand for labor and lowering wages and employment opportunities. Correcting the anti-labor biases in the tax system could thus resolve a number of macroeconomic problems.

Finally, in Chapter 3, Gaffney addresses the role of banking in the success or failure of an economy. A primary function of banks is to create liquidity—by effectively breaking large, lumpy investments into smaller units that can facilitate economic transactions. But borrowing short and lending long makes banks inherently vulnerable to loss of confidence by the public, particularly after booms in which banks have lent heavily for land and long-term projects. To prevent the conditions that lead banks to the brink of insolvency (and force central banks or governments to bail out the banking system), Gaffney proposes a simple remedy: restrict collateral to assets with short maturity, and avoid land as collateral. This conclusion follows directly from his analysis of capital turnover in Chapter 2. In Chapter 3, he applies the same logic to the banking system and shows how lending on inflated land values and premature construction led directly to the crash of 1929 and the Great Depression (as well as lesser-known economic crises).

VII

Conclusion

IN THE FOLLOWING ESSAYS, Mason Gaffney arrives at analytic and policy conclusions at variance with most other members of the economics profession. He directs attention to differences between land and capital, between different maturities of capital, and between quantitative and qualitative controls over banking. Applying those differences, he recommends solutions that are completely absent from the normal instruments of macroeconomic management: (1) a tax on land values (combined with improved assessment) heavy enough to remove the incentive to speculate on them; (2) a reduction of taxes on labor and an end to favorable tax treatment of capital, both to avoid distortions in the use of labor and capital in production; and (3) regulation of banking to eliminate the use of land as collateral for loans. Together, those policies would effectively put an end to real estate bubbles and the resulting painful contractions.

As important as those conclusions are, they are perhaps not as significant as the method by which they were reached. The most fundamental difference between Gaffney's approach throughout his career and mainstream views on macroeconomics is that Gaffney begins his analysis with real transactions and real costs. That is radically at odds with the idea that one can manage economies simply by manipulating monetary aggregates, without any reference to the realities behind them. Unlike most other economists, Gaffney does not presume that all forms of capital are instantaneously interchangeable just because they are represented by the same mathematical symbol in models of economic behavior. Instead, he gives priority to understanding actual relationships in the world and their consequences. He does not deny the value of abstraction or even of mathematical formalism, but he does not allow them to become ends in themselves. Gaffney reminds us that we need to test those abstractions by their ability to improve social conditions. For if economists cannot help us solve real problems, of what use are they?

Notes

1. The House Price Index of Federal Housing Finance Agency (FHFA) was previously published by the Office of Federal Housing Enterprise Oversight (OFHEO).

2. There are three housing prices indices one may consider. (1) National Association of Realtors or NAR (Christie 2006). The NAR index showed that "from the fourth quarter of 2005 to the first quarter of 2006, median prices nationwide fell from $225,300 to $217,900, a drop of 3.3 percent. . . . [I]n the fourth quarter of 2005, prices fell 1 percent from the third quarter." (2) S&P/Case-Shiller (Standard and Poor's 2006). As late as July 25, 2006, the S&P/Case-Shiller Index said that U.S. home prices were still trending upward as of May 2006. On August 5, 2006 (a year after NAR showed a decline), the S&P indicated that there was no change in S&P/Case-Shiller Composite Index from May to June of 2006, meaning that house prices had stopped rising. (3) The FHFA House Price Index (HPI) (Federal Housing Finance Agency 2009) peaked in April 2007 and fell continuously through December 2008 (from a peak of 224.5 to 199). However, "[t]he [FHFA] index tracks home values on mortgages that were guaranteed or funded by Fannie Mae and Freddie Mac. Therefore, it is missing the entire subprime mortgage market, and lots of falling home values" (Wilder 2009).

Conclusion: I judge the turning point as the end of 2005 based on the (more comprehensive) NAR index *and* on the fact that *the rate of increase* in housing prices fell in the FHFA Index the fourth quarter of 2005 and even more in the first quarter of 2006.

3. There is more than one way of counting foreclosures. The Mortgage Bankers Association National Deliquency Survey of bank foreclosure inventories gives higher estimates than RealtyTrac's estimate of housing units that received at least one foreclosure filing. I have used the higher numbers for 2006–2008 from MBA (2008, 2009), rather than the corresponding estimates of 0.6 percent, 1.0 percent, and 1.8 percent from RealtyTrac Staff (2008, 2009), because the MBA survey appears to be more comprehensive.

4. Historian David M. Kennedy (1999: 174), referring to the way Americans experienced the Great Depression, has explained why financial trauma can lead to suicide: "Contempt for the Depression's victims, ironically enough, often lodged most deeply in the hearts and minds of the victims themselves. Social investigators in the 1930s repeatedly encountered feelings of guilt and self-recrimination among the unemployed, despite the transparent reality that their plight owed to a systemic economic breakdown, not to their own personal shortcomings. The Depression thus revealed one of the perverse implications of American society's vaunted celebration of individualism. In a culture that ascribed all success to individual striving, it seemed to follow axiomatically that failure was due to individual inadequacy."

5. "The problems in California, Florida, Arizona and Nevada are somewhat atypical of the rest of the country. These four states were responsible for 62 percent of all foreclosures started on prime ARMs and 84 percent of the increase in prime ARM foreclosures. These states also accounted for 49 percent of subprime ARM foreclosures started during the first quarter [of 2008] and were responsible for 93 percent of the increase in subprime ARM foreclosures. In addition, these four states accounted for 60 percent of the increase in foreclosures on prime fixed-rate mortgages and 53 percent of the increase in subprime fixed-rate mortgages" (York and Vintner 2008).

6. Several dozen nations (or generally a few major cities within each nation) experienced recent real estate bubbles. The following list (with house-price appreciation from 2000–2002 to 2006–2008 in parentheses, or with alternative dates) is derived from Montagu-Pollock (2009). The data were presented originally in graphic form, not in tables, so there is approximately a 5–10 percent margin of error just from the way the data were presented. Argentina (40 percent), Australia (70 percent), Canada (50 percent from 2000 to 2007), China (Shanghai only, 150 percent), Colombia (80 percent), Croatia (60 percent), Cyprus (40 percent), Denmark (>200 percent from 1993 to 2007), Finland (100 percent from 1997 to 2008), France (Paris, 160 percent from 1998 to 2008), Greece (225 percent from 1993 to 2007), Hong Kong (175 percent), Hungary (80 percent from 2000 to 2006), Iceland (>60 percent), Indonesia