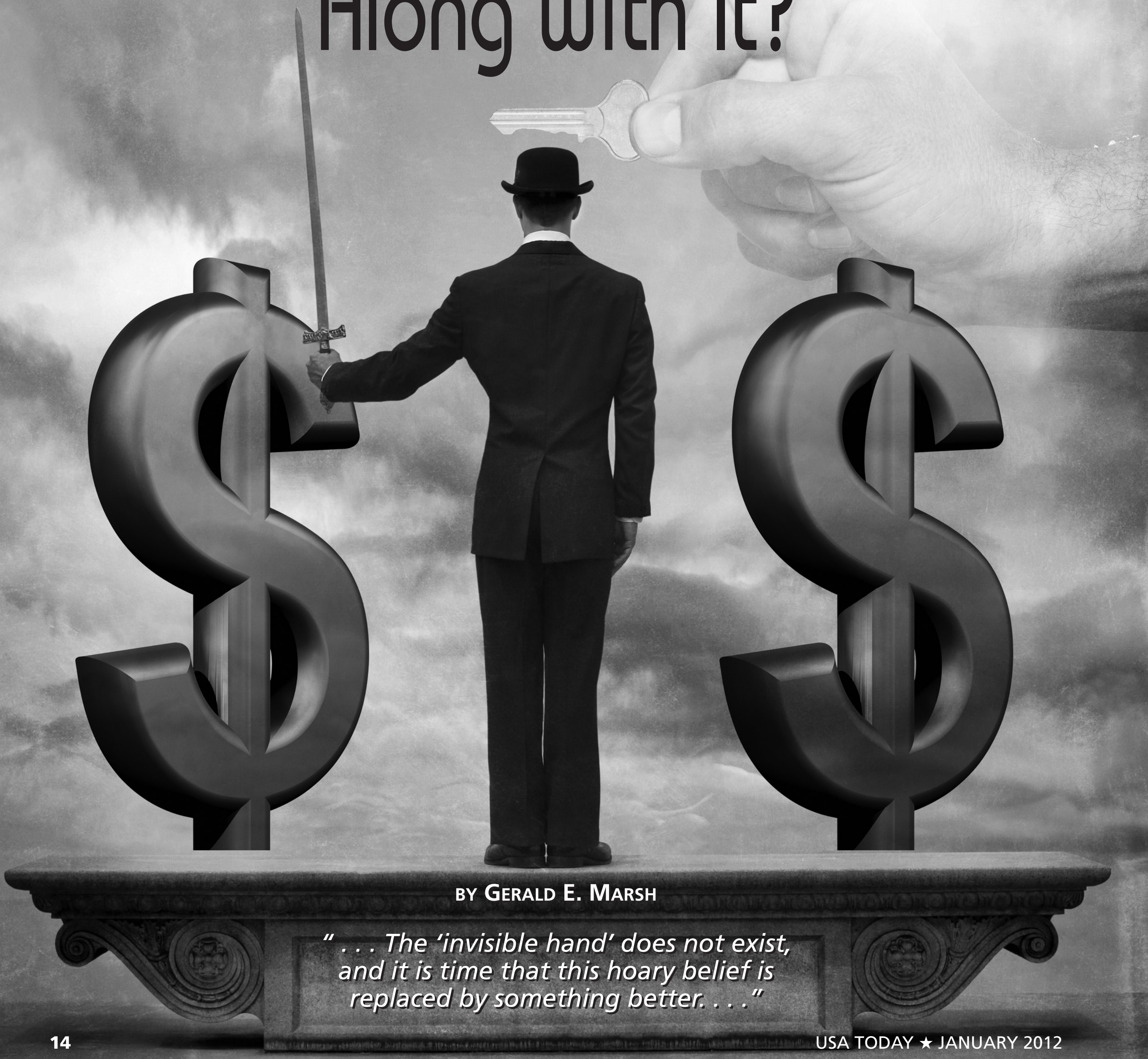
# If the Invisible Hand of the Free Market Is Dead, Has Capitalism Been Buried Along with It?



BY GERALD E. MARSH

*" . . . The 'invisible hand' does not exist, and it is time that this hoary belief is replaced by something better. . . ."*

"BIG BANKS Hurt by Struggling Consumers"—so reads a recent headline on the front page of the *Financial Times*. Many would be outraged, believing that the headline should be turned on its head: "Struggling Consumers Hurt by Big Banks." How did we get to the point where demonstrations against the banks and financial system have taken place in so many cities around the world? It is not so much the financial instruments and innovations introduced over the last 30 years that are responsible as it is the beliefs held by those who introduced them and those whose responsibility it was to provide oversight. The real origin of the financial crisis is the belief in the absolute supremacy of the market.

The idea that the market needs no regulation, and that an absolutely free market serves the best interests of all, dates back to Adam Smith, widely considered the father of economics, and the author of *The Wealth of Nations*. In this magisterial tome, he maintains that the economic activity of an individual is "led by an invisible hand to promote an end which was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it."

Max Lerner wrote in his 1937 introduction to the Modern Library edition of this work that the idea "that there is a 'natural order,' whereby the pursuit by each individual of his own self-interest contributes ultimately to the social welfare, that must lie outside the realm of science or of historical verification, and must be set down as a cardinal principle of the faith of the age." Put in modern terms, the idea of an "invisible hand" guiding the market amounts to faith-based economics.

Lerner went on to draw the obvious conclusion: " . . . Since a natural order exists whereby the enlightened selfishness of all men adds up to the maximum good of society, since there is a 'divine hand' which guides each man in pursuing his own gain to contribute to the social welfare, it must follow that government is superfluous except to preserve order and perform routine functions. The best government is the government that governs least. The best economic policy is that which arises from the spontaneous and unhindered action of individuals."

Sound familiar? This is the fundamental belief of the right wing of the Republican Party and the Tea Party. Of course, Lerner believed no such thing, characterizing it as "anarchy plus a constable."

There is another important contributor to the financial crisis that has a close relation to the invisible hand—the use of financial models that attempt to simulate the market and guide economic policy.

The connection between the invisible hand and financial models has been captured by Sam Ouliaris in his June 2011 article in *Finance & Development*: "Today's economists build models—road maps of reality, if you will—to enhance our understanding of the invisible hand." Some models use linear approximations to represent the intrinsically nonlinear nature of economic relationships. Such macroeconomic models have been employed since the mid 1950s. If linear models are used to help formulate economic policy, there is a real danger that the guidance is likely inadequate or wrong.

Nonetheless, as put by James Bullard and Alison Butler in the July 1993 *Economic Journal*, "Most present day policy advice is linked to linear theories, and while few would claim this approach is exactly correct, many believe that linear specifications provide an approximation to the true law of motion for the macro economy."

However, the fact that the models are linear means that this is true only if the economy is near a stable point, which, as shown by recent events, is not always the case. As a result, much effort is being expended today to understand the role of nonlinearity and chaos in macroeconomic models.

Chaos is used here as a technical term where the time evolution of the model depends very sensitively on the initial economic conditions that must be put into the model to run it. These models differ from conventional economic models in that their output can become chaotic and lead to very large fluctuations that some economists believe would indicate the need for government intervention in the economy to damp the fluctuations. Frankly, the concept of a "true law of motion for the macro economy" boggles the mind. Not even the physicists hired by Wall Street to build such models would show such hubris.

Perhaps the most important models that led to the financial crisis are those that are used to represent risk. Before these were developed, investors generally would put money only into mortgage pools when the risk essentially was zero because of implicit guarantees by the Federal government through the Government National Mortgage Association—GNMA or Ginnie Mae, which should not be confused with Fannie Mae or Freddie Mac. The latter are government-sponsored enterprises, while Ginnie Mae is wholly owned by the U.S. government.

The purpose of pooling mortgages or other assets is to reduce risk. This kind of securitization works only if the assets are not dependent on one another, *e.g.*, if one mortgage defaults in a mortgage pool, the assumption is that there is no dependence between it and the other mortgages in the pool. A pool of bonds, mortgages, and other assets is known as a collateralized debt obligation or CDO. There also is something known as a synthetic CDO, which consists of short positions in credit default swaps. The difference between CDOs is not important for what follows.

The problem with CDOs is determining their inherent risk, which depends on the statistical relation between the assets comprising the CDO. In 1997, J.P. Morgan, through its subsidiary RiskMetrics Group, developed a model called CreditMetrics to determine the risk inherent in a complex financial product such as a CDO. It, in turn, relied on the work of mathematician David Li, who developed a particular form of a copula model (coupling the individual probabilities of two assets in the CDO), parameterized by a single number known as a correlation coefficient. Default dependence was determined by a joint Gaussian distribution—the kind of shape one sees in a stone step if monks have been treading on it for hundreds of years. Having a single number like the correlation coefficient to estimate risk greatly simplified the problem of determining risk and led to an enormous growth in CDOs—and not only CDOs, but bundles of them known as CDO squared or CDO2 or even higher powers.

One way to hedge against the risk inherent in a CDO is to buy a form of insurance known as a credit default swap (CDS). The growth in CDOs led to an even greater growth in this credit derivative. The gross notional value—the value of outstanding contracts—of the CDS market rose to 62 trillion dollars during the period 2000-08. By 2010, this had fallen to about 26 trillion dollars. If one compares the 2008 value of the CDS market to the world's gross domestic product in the same year of about 60 trillion dollars, it is clear that not all of the CDS market represents a one-to-one insurance against assets representing debt. Anyone, even those not owning the asset, can buy a CDS on it. A CDS of this type is known as naked credit default swap. Up to 80% of the CDS market is estimated to be of this type. It is like buying an insurance policy on your neighbor's house; if it burns down your neighbor will be reimbursed (if he has insurance) and so will you (even if he does not have insurance).

It is not important to understand the details of Li's copula model, only the fact that the simplification introduced by the use of this model led to an enormous growth in the CDO and CDS markets—and that the use of a joint Gaussian distribution was inappropriate for determining risk in many cases, including for mortgage-based CDOs. As put by Li in a 2005 *Wall Street Journal* article, "The most dangerous part is when people believe everything coming out of it."

So, if the use of Li's formula was known to have potentially serious problems, why did managers and bankers continue to use it? Surely, the so-called quants—what *The New York Times* defines as the "nerdy epithet for Wall Street's analytical alpha dogs"—knew there were serious issues with using Li's formula for risk determination and brought these to the attention of upper management in banks and other financial institutions. These warnings fell on deaf ears.

As put by financial journalist Felix Salmon, "Banks dismissed them, partly because the managers empowered to apply the brakes didn't understand the arguments between various arms of the quant universe. Besides, they were making too much money to stop."

Perhaps this is what Citicorp CEO Chuck Prince meant when he said in a 2007 interview, "When the music stops, in terms of liquidity, things will be complicated but, as long as the music is playing, you've got to get up and dance. We're still dancing."

The music stopped shortly thereafter; the banks were bailed out because fears were raised that the entire banking system would collapse; and the people, not those who caused the problem—none of whom have been prosecuted—will have to pay. Yet, there is one very clear lesson to be learned from this sad and sordid history: There is no "invisible hand," whether due to a "natural order" or a divinity—nor can quantitative economic models take its place. If this indeed is the case, one cannot claim the distribution of wealth and power in this country is the result of market forces optimizing the economy. People determine the rules of the game and are responsible for the ultimate distribution of wealth through regulation (or the lack of it) and the tax structure.

Over the last 30 years or so, until the collapse, the music continued to play with ever increasing volume and, while many boats rose along with those carrying the upper one percent, the middle class gained very little real increase in income, and many—when the music stopped—found themselves underwater. During this period, the continuous and growing attack on the size of government and the aggressive lowering of taxes guaranteed that our infrastructure spending stagnated and did not even keep up with maintenance. The resources needed for investment in future growth instead went to the rich. Congress, the supposed voice of the people, allowed this because they are beholden to wealthy families and corporations for campaign financing—this being one of the most important connections between money and power. The result has been the fraying of what is known as the "social contract," with the resulting social unrest we see today.

The term dates back to Jean Jacques Rousseau and his famous work, *The Social Contract and Discourses*. Rousseau's purpose in writing the work was "to inquire if, in the civil order there can be any sure and certain rule of administration, taking men as they are and laws as they might be." His work played a big role in inspiring the French Revolution but, perhaps more important, was its impact on political philosophy. Rousseau identifies the interests of each of the citizens with those of all, but also argues that the omnipotence of the Sovereign, which in Western democracies would be the government, is essential for the preservation of society, which in turn is necessary for the individual.

While Rousseau was writing in the 18th century, and much of what he wrote may seem time-bound to many readers, his illuminating chapter on the social compact continues to resonate today: "I shall end this chapter and this book by remarking on a fact on which the whole social system should rest: *i.e.* that, instead of destroying natural inequality, the fundamental compact substitutes, for such physical inequality as nature may have set up between men, an equality that is moral and legitimate, and that men, who may be unequal in strength or intelligence, become every one equal by convention and legal right."

Most relevant to today is the footnote to this paragraph: "Under bad governments, this equality is only apparent and illusory; it serves only to keep the pauper in his poverty and the rich man in the position he has usurped. In fact, laws are always of use to those who possess and harmful to those who have nothing: from which it follows that the social state is advantageous to men only when all have something and none too much."

What is too much? Today, we hear a great deal about how the top one percent of households (the so-called upper class) have some 35% of the net worth in the U.S. and 43% of the financial wealth. Of this one percent, wealth and income are concentrated in the top 0.1%. Since 1920, the share of the wealth held by the top one percent was in the range of 20% to 45%. The lowest share was during the late 1970s. Since 1980, the rise in wealth for the top one percent was some 15%, taking it back to the average since 1920 of some 30 odd percent. It is unclear, however, if these figures include all wealth held outside the U.S.

Income, as opposed to net worth, is another story. For the top one percent, income as a share of all U.S. income rose from some eight percent since 1978 to 24%. For the top 0.01%, income over the same period rose from one percent to six percent. Marginal tax rates for the top tax bracket dropped from close to 70% to about 11% over the period from 1980 to 2011. Economists generally maintain that higher tax rates reduce the total tax collected and undermine competitiveness, but this observation simply reflects the nature of the tax legislation that allows certain individuals, through numerous loopholes, to avoid taxes.

## The one-percenters prosper

The fact that the top one percent of taxpayers account for around 40% of income tax, up from 28% in 1988, simply reflects the increase in the amount of money going to the wealthy.

However one wants to parse these numbers, they fall into the category of "too much" since it is during this period that the income of the bottom 99% rose little if at all (and decreased for many). This also is the period when, to put it kindly, America's infrastructure was subjected to a policy of benign neglect, although many would argue with the adjective. Keep in mind here that the issue is not the inequality one sees in our society, but the fact that the growing inequality is impacting the well being of the nation as a whole and damaging its prospects for the future.

The country desperately needs quality primary and secondary education and a health system that provides needed care at reasonable cost for everyone. All advanced Western nations now do this for around half of what is spent in the U.S. to achieve a miserable outcome. It is not possible to improve the health and educational systems while maintaining the current model with all its vested interests.

It was belief in Smith's "invisible hand," formulated by the Chicago School of Economics as the efficient-markets hypothesis and rational-expectations theory that destroyed the old social contract. The efficient-markets hypothesis in particular led to the deregulation of the banking system, something strongly supported by, among others, former Fed Chairman Alan Greenspan. We now have more than enough evidence that the "invisible hand" does not exist, and it is time that this hoary belief is replaced by something better—a new contract among the general public, the wealthy, and the government.

A new social contract must, first and foremost, reregulate the financial system. The tax laws need to be changed to a true graduated income tax and loopholes eliminated at every level. Moreover, the cry for smaller government should be understood for what it is: a call not for greater efficiency, but rather an attempt to curtail regulation needed to protect the health and well being of the people as a whole, and the spending required for infrastructure and those items very much in the interests of the country but not necessarily in the narrow interests of business. A level playing field for business that encourages entrepreneurship should be a principal role of government.

For this to happen, the connection between power and government in the form of campaign financing has to be broken. How to do this is an interesting question, but the curtailment of Political Action Committees (PACs) and independent-expenditure only committees (Super PACs) must be a start. The latter were a result of two recent decisions, one by Supreme Court and the other by the D.C. Circuit Court. The first held that the government could not censor political broadcasts when corporations or unions fund them, and the second eliminated limits on contributions to PACs. In principle, Super PACs cannot coordinate directly with political parties or candidates and must disclose their donors. The existence of these types of entities is not something that would have met with the approval of the Founding Fathers.

It is in the interests of the wealthy in this country to avoid social unrest. As put by Kishore Mahbubani in a *Financial Times* op-ed, "Wealthy individuals have created schemes to avoid paying taxes. If they are smart, they should create schemes to pay taxes and ensure that most of it gets channeled to those in need."

Not doing so will bolster the outrage of people who increasingly lack economic opportunities, as well as contribute to their growing alienation from mainstream politics. The risks are high. As put by the *Financial Times*, "In order to preserve the capitalist model, it is vital to reform. For without public support, it will not thrive." Some would say "not survive." ★

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