THERE is broad agreement that Alan Greenspan, the former Fed chairman, was wrong to have believed that market forces alone would insulate society from excessive financial risk. But Mr. Greenspan was wrong for reasons very different from those offered by his most vocal critics.

Those critics fault Mr. Greenspan for having overestimated the strength of competitive forces, a point he essentially conceded in Congressional testimony last fall. But the financial crisis was not caused by a shortfall in competition.
On the contrary, it was fueled by competition’s growing strength.

Adam Smith’s theory of the invisible hand, which says that market forces harness self-serving behavior for the common good, assumes that markets are competitive, and most markets have in fact become more competitive over time. Today, if an opportunity exists anywhere in the world, information-age entrepreneurs can seize it more quickly than ever.

The invisible hand, however, requires not just strong competition but also two other preconditions. The economic models that spawned Mr. Greenspan’s former optimism simply assume those conditions, despite compelling evidence of their absence.

First, those models assume that rewards depend only on absolute performance, but in the real world, payoffs are often tightly linked to relative performance. When a valuable new piece of information becomes available to the investment community, for example, the lion’s share of the gain goes to whoever trades on it first. For an individual firm like Goldman Sachs, it is thus completely rational to invest millions of dollars in computer systems that can execute stock trades even a few seconds faster than others. But rivals inevitably respond with similar investments. Taken together, these expenditures are wasteful in the same way that military
arms races are.

A second problematic assumption of standard economic models is that people are properly attentive to all relevant costs and benefits, even those that are uncertain, or that occur in the distant future. In fact, most people focus on penalties and rewards that are both immediate and certain. Delayed or uncertain payoffs often get short shrift.

Given the conditions under which human nervous systems evolved, these aspects of our behavior are unsurprising. Because immediate threats to survival were pervasive, those who didn’t seize short-term advantage often didn’t survive.

Such nervous systems provide an erratic guidance system for the invisible hand. Consider, for example, the difference between actual investor responses to the housing bubble and those predicted by standard economic models.

When house prices are rising steadily, mortgage loans are safe, but relatively low-yielding, investments. During the recent bubble, unregulated wealth managers created mortgage-backed securities that enabled investors to magnify their returns through financial leverage — that is, by enabling them to invest money borrowed from others.

Many experienced analysts had warned for years that those derivative securities were vastly overpriced, but Mr.
Greenspan assumed that prudent concerns about the future would prevent investors from taking foolish risks. Real investors faced a tough choice: continue earning high returns from mortgage-backed securities, or move their money to safer vehicles and watch their friends and neighbors pass them by.

Wealth managers faced a tough choice of their own, since they knew that many customers would desert them if they failed to offer the higher-paying, but riskier, investments. Managers also knew that if markets turned against them, penalties would be limited by the fact that almost everyone had been following the same strategy. The resulting collapse was all but inevitable.

Memories are short. Immediately after a severe flood, most people are reluctant to build on a flood plain. But land on flood plains is cheaper, and the prospect of short-term advantage quickly lures many to abandon their caution. That is why many jurisdictions adopt strict regulations against building on flood plains.

The same logic dictates regulation to limit the damage caused by financial bubbles. The list of financial practices that merit regulatory scrutiny is long. But the most important first step is to limit leverage. Existing regulations prohibit banks from leveraging their investments by more than 10 to 1. Other financial institutions, however, are
exempt from such regulation. Before the bubble burst, much higher leverage ratios became common in those institutions, which were aggressively marketing mortgage-backed securities. That loophole cries out to be closed.

Is it practical to limit leverage in a global capital market? If other countries don’t take similar steps, Americans could simply move their money abroad. But we could limit the leverage of the domestic financial institutions that provide the capital on which American businesses and consumers depend. If American investors wanted to achieve greater leverage abroad, they would have to do it with money borrowed elsewhere. Such a restriction would be enough to deprive asset bubbles of the fuel they require to threaten stability.

Of course, periodic asset bubbles occurred even when markets were less competitive. But people in earlier times were less aware of the high returns being earned by highly leveraged investors. Relaxed regulation and increased competition now confront investors with temptations that growing numbers of them are ill-equipped to resist.

Alan Greenspan’s erstwhile faith in the invisible hand notwithstanding, it was never reasonable to have expected market forces to protect society from the consequences of this risky behavior.
Robert H. Frank, an economist at Cornell University, is also co-director of the Paduano Seminar in Business Ethics at the Stern School of Business at New York University.