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Defining Ideas

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DEFINING IDEAS

Three Cheers for Three Nobels

by David R. Henderson (Research Fellow)

To the Committee's credit, the prizes were based primarily on the importance of the three economists' work.

"Today, Apple announced a bigger dividend than stock market analysts predicted. So I should buy Apple stock, right?" I sometimes get this kind of question from people who know I'm an economist. My answer: "No, you should *have* bought Apple stock." Why? Because of basic economic reasoning combined with decades of empirical evidence, much of it provided by or inspired by one man: financial economist Eugene Fama of the University of Chicago.

On Monday, the Nobel Committee awarded the 2013 Nobel Prize in Economic Sciences to Fama, Yale University's Robert Shiller, and the University of Chicago's Lars Peter Hansen "for their empirical analysis of stock prices."



Photo credit: Adam Baker

Fama's major contribution was to show that stock markets are efficient. The term "efficient" here does not mean what it normally means in economics—namely, that benefits minus costs are maximized. Instead, it means that prices of stocks rapidly incorporate information that is publicly available. As George Mason University economist Alex Tabarrok puts it, prices now move on earnings news not just within seconds, but within milliseconds. That is why you can't make out by buying Apple stock after an unexpectedly high earnings report. Apple's stock price *will* rise, but by the time you buy, it is too late. Eager investors with faster buy orders will have already bid the price higher.

One implication of market efficiency is that trading rules, such as "buy when the price fell yesterday," don't work. As Fama's University of Chicago colleague John H. Cochrane has written, many empirical studies have shown that "trading rules, technical systems, market newsletters and so on have essentially no power beyond that of luck to forecast stock prices."

This one insight has a huge implication for large and small investors alike: don't waste your money on professional financial managers who actively try to pick

stocks. Fortunately, one early pioneer who bet his career on Fama's insight was John Bogle, founder of the Vanguard Group. In 1975, Bogle started the Vanguard 500 Index Fund. His idea was to have a fund indexed to the overall market and save the costs of hiring experts to predict stock prices. That's because, like Fama, he didn't believe that one *can* predict them. The result is that the tens of millions of investors who, like me, buy index funds from Vanguard and its competitors have saved, in total, hundreds of billions of dollars by not buying worthless investment advice.

When you fully understand Fama's insight, you find yourself having trouble glibly talking about "bubbles"—that is, stock prices that are higher than justified by market fundamentals. As Fama said in a *New Yorker* interview in 2010, "It's easy to say prices went down, it must have been a bubble, after the fact. I think most bubbles are twenty-twenty hindsight. . . . People are always saying that prices are too high. When they turn out to be right, we anoint them. When they turn out to be wrong we ignore them." Fama didn't renew his subscription to *The Economist*, he said, "because they use the word bubble three times on every page."

Fama also believes, in the Milton Friedman University of Chicago tradition, that free markets are better than government at allocating resources. He strongly opposed the 2008 selective bailout of Wall Street firms, arguing that, without it, financial markets would have sorted themselves out within "a week or two." He also pointed out that "if it becomes the accepted norm that the government steps in every time things go bad, we've got a terrible adverse selection problem."

Someone who does believe in stock market bubbles is Fama's co-winner Robert Shiller. In 1996, Shiller claimed that stock prices were too high to reflect fundamentals; in other words, he thought there was a bubble. At the time, the Standard & Poor's 500 stock market index was at about 740. It is now more than double that and, inflation adjusted, over 50 percent higher. Some bubble.

In the scholarly work for which Shiller won the Nobel Prize, he found that stock prices fluctuate more than can be explained by fluctuations in dividends. To reach this conclusion, though, he made a strong assumption: that the real rate of interest—that is the rate of interest after correcting for inflation, is constant.

Shiller's finding set off a huge revolution in finance. It is now accepted that high prices relative to earnings signal low subsequent returns and vice-versa. Drawing on psychology, Shiller has argued that many investors are not always rational. He's right. Far too many people try to beat the market when they should be following Fama's advice and investing in index funds. Shiller's findings do leave a small opening for investors. George Mason University economist Tyler Cowen has noted, that, contra Fama, a very patient investor *should* be able to beat the market by betting against short-term market movements. So, for example, if the price has fallen more than can be explained by relatively steady dividends, buy and hold.

Two other aspects of Shiller's work have also been valuable: (1) his contribution to the Case-Shiller home price index, which has been important for those who want good data on home prices both nationally and regionally; and (2) his advocacy of government pensions, including entitlements like Social Security, "indexed to some indicator of taxpayer ability to pay, such as GDP."

So, for example—I'm building on what Shiller suggests—the government could allocate x percent of GDP to Social Security and y percent to Medicare and then, based on those percentages, adjust payments and benefits annually. That way, taxpayers and pension recipients would split the risk rather than having it all fall on taxpayers alone. Given that x and y are both growing rather than staying fixed, such a reform would be a boon to the less-politically-powerful young people who will otherwise be stuck paying an increasing percentage of their income for Social Security and Medicare. For that one suggestion, Shiller's young students at Yale should build a statue of him.

Those who want a good understanding of Shiller's policy ideas should read his well-written 2012 book, *Finance and the Good Society*. Shiller, who is not a strong defender of economic freedom, could have taken the demagogic way out and attacked financial derivatives because of their role in the 2007-2008 financial crisis. But he doesn't do that. Instead, he draws on his deep understanding of financial markets to *defend* derivatives. The term "derivatives," he notes, "has become a dirty word." But a derivative "is merely a financial product that derives from another market, and it is not inherently good or evil." Shiller points out that derivatives go back a long way, even having been mentioned by Aristotle. Shiller's case for derivatives is the standard one: They allow people to, in essence, buy insurance against a loss in the value of an asset.

Because derivatives allow us to spread and shift risk, Shiller advocates even greater use of derivatives, pointing out a kind of derivative renters in Chile use. Because Chile had high inflation in the 1960s and 1970s, many contracts and quoted prices are not in money but in UF, which, he explains, is "a non-monetary unit of account indexed to inflation." Because rent is likely to be quoted in UFs, and there are no fluctuations in its real value over the length of the lease, the renter pays a different amount in pesos every month.

Why would that be relevant in the United States, where inflation has been low for 30 years and not that variable? It isn't directly relevant. But if prices could be denominated in real terms and not in "rubber" dollars, why couldn't mortgages be set up in advance with what Shiller calls a "preplanned workout?" He proposes a mortgage that specifies changes in terms in the event of a recession or a fall in home prices. Shiller argues that if such mortgages had been the norm, we "would probably not have experienced the financial crisis of 2007."

Whereas my political free-market views differ from Shiller's, one thing I appreciated in my one interaction with him was his complete unwillingness to take cheap shots. I remember the day well. I was at the Hoover Institution when I got a call inviting me to be interviewed on "On Point," a Boston radio show that is syndicated to a large number of National Public Radio affiliates. The topic was the 2003 Bush tax cut on capital gains and dividends. I thought, and still think, those cuts to be much better, from an economic efficiency standpoint, than the more-famous 2001 Bush tax cut. So I was eager to defend them.

The show's host, Tom Ashbrook, was quite critical of the cuts, and his choice of the two other guests reflected that. One was a left-wing labor union official whose name I cannot remember. I do remember that he ranted a lot. The other was Robert Shiller. Unlike the union official, Shiller did not attack my motives. A number of times, I argued that high marginal tax rates and taxes on capital gains and dividends reduce the incentive to invest and that this hurts workers in the long run. When I made those points, Ashbrook asked Shiller his view. By Ashbrook's tone—he was one angry dude that day—I could tell that he wanted Shiller to refute me.

Shiller did disagree but, invariably, he prefaced his disagreement, not by marginalizing me, but by *doing the opposite*. "David is stating the mainstream economist view," said Shiller, and he, by his own admission, was stating a minority viewpoint. I was so impressed by Shiller's gentlemanly behavior that I e-mailed him afterwards to thank him.

I hope it is not ungentlemanly to point out one dissatisfying part of Shiller's *Finance and the Good Society*: Shiller's treatment of government. First, he often understates the evil of government. Second, and related to the first, he treats government as if it is mainly a group of people working for the common good.

Consider Shiller's discussion of one of the main atrocities of government in the twentieth century: Soviet collectivization of agriculture. Millions of farmers starved to death because of Stalin's actions, a fact that Shiller's Yale University colleague, historian Timothy Snyder, documented in the blood-curdling book, *Bloodlands*.

Shiller does not minimize the harm. He writes that eleven million people died in the famine of 1932-33, which, if anything, is probably somewhat of an overestimate, and that the famine was due to collectivization. So what's the problem? Shiller minimizes the evil intent behind the harm. The deaths, he writes, "reflect government error." In other words, Shiller sees the deaths as a *mistake*. In fact, what happened was that Stalin forcibly took grain from millions of Ukrainian farmers, knowing full well that the result would be starvation. Snyder highlights a Soviet government poster that read, "We will destroy the kulaks [Ukrainian farmers] as a class." The word "error" does not do justice to what happened.

The third recipient of the prize, Lars Peter Hansen, earned it for the mathematical techniques he developed that apply to stock prices and to other economic models. Here's how Hansen's University of Chicago admiring colleague, the aforementioned John H. Cochrane, put it to me in an interview: "Hansen managed to boil all the complex statistical techniques used in understanding economic models into just taking averages. His techniques allowed economists to study the economy one piece at a time, and to focus on the robust important predictions of a model without being distracted by irrelevant sideshows."

Some years, the Nobel Committee's choice of recipients seems to make a partly political statement. That didn't happen this time. To the Committee's credit, the prizes were based primarily on the importance of the three economists' work.

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