



By PAUL A. SAMUELSON

Dogma of the Day

Invest for the long term, the theory goes, and the risk lessens

AMERICA IS LIVING in the biggest stock market boom in our history. The Roaring Twenties have by now been far surpassed both in duration and broadness of public participation.

Many observers find this puzzling. The Main Street U.S. economy is admittedly doing well: Our net job creation and real GDP growth rate put to shame European and Japanese performances. Also, inflation has so far been reassuringly contained. However, it is an open secret that we now live in the new Ruthless Economy, where downscaling and disappointing productivity growth make the middle- and lower-income

classes apprehensive and stagnant in their earnable living levels.

I cannot predict the future, but I do not find the current bull market puzzling. The dogma pervading the investing community suffices to explain the story. Be a long-term investor. Buy and hold a diversified portfolio of common stocks. After all, 150 years of market statistics—1,800 months' worth of data—show that those who boldly invest in common stocks for at least a 15-year horizon always come out ahead of their timid brethren.

This axiom is supposedly proved by economic history and by the mathematical laws of probability: The Law of Large Numbers guarantees that when the number of coin tosses, N , becomes large, the probability of equality between numbers of

heads and tails mathematically converges to 1 as N goes to infinity. So with the superiority of stocks for large- N investor horizons. QED. If true, this is a compelling dogma. It makes for good sleep at night and comfortable retirement living.

Is the dogma true as told? Alas, no. Those who believed in it before and after the great October 19, 1987, worldwide stock crash are nevertheless smiling all the way to the bank (or, better, to the mutual fund). And asset-allocating timers, like Jeffrey Vinik, who used to run Fidelity's Magellan fund, may wish they had drunk deeper of the good whiskey that delivers the joy and peace now being exported to Main Street from Wall Street.

Here is how to test the theory. Write down all those 1,800 percentage changes in monthly stock prices on as many slips of paper. Put them in a big hat. Shake vigorously. Then draw at random a new couple of thousand tickets, each time replac-



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ing the last draw and shaking vigorously. That way we can generate new, realistically representative possible histories of future equity markets.

Is it true that in all these histories you always come out ahead in stocks rather than safe-but-less-volatile securities? Definitely not. Most of the time the buy-and-hold common stock investors do beat their more cautious neighbors; and, as the time horizon N becomes larger, the odds do grow that the bold holders of stock will win the duel. But it is also true that a longer time horizon brings bigger losses when an inevitable loss does occur.

Canny risk averters should always keep in mind, in a rational, nonparanoid way, the pains they will feel in those probability-calculated bad-outcome scenarios. (Ask yourself: Will stepping down toward a poverty level, when that rarely

but inevitably does happen, outweigh for me the pleasures that occur in those likely outcomes when my equity nest egg does increase?) When we each do that, those of us who truly are more risk averse will rationally hedge our bets by limiting our exposure to volatile equities.

Yes, in those new histories that the future will bring—even when past probabilities still operate intact—you definitely can sometimes lose, and lose big, no matter whether you have 15 or 40 years to go before retirement. The dogma proves too much. If 60 percent in stocks beats 50 percent of a sure thing, then 100 percent beats 60 percent; and leveraging to put 130 percent in stocks beats 100 percent!

Still unconvinced? Let's go from academic mathematics to practical insurance. Dr. Zvi Bodie of Boston University, acclaimed pension expert, will be our

guide in buying portfolio insurance to cover any shortfall of outcome below the 5 percent safe rate of total return available from past money market funds. What insurance premium must the one year investor pay to be guaranteed against ending up with less than the safe 5 percent of a money market fund? And what premium N must investors pay for time horizons of $N = 2$, or 10, or 40 to ensure they do not go below the safe rate? The Black-Scholes options formula, Dr. Bodie points out, must be used by any insurance firm that you can count on to stay solvent. Does premium N go down as N grows—as the current dogma (with its misunderstanding of the Law of Large Numbers) implies?

No. And no. The premium N grows with N , and when N gets really big the premium eats up 100 percent of your excess gain. Some bargain. Total risk grows rather than diminishes with the time horizon. Whenever you pay the needed premium to cover

any losses that go below the modest safe rate, you are left only with that safe rate.

Don't misunderstand. Professor Samuelson does not advise against 100 percent invested in equities; or 110 percent; or 80 percent; or 10 percent. I can demonstrate reasons why folks who do understand their own degree of risk tolerance will want to just buy and hold diversified common stocks. And I can demonstrate why more risk averse folks should eschew current fashions. My point is this: Don't do what you do for the mistaken sure thing reasons given by the current dogma.

One last warning. If belief in this dogma ever becomes virtually unanimous, it must self-destruct. We will be in a Japan-like stock-and-land bubble—with no anchor for prudent value and no cap for price-earnings ratios. Only the Tooth Fairy can then fulfill your dreams. ■

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