

The Many Ways to Play the Averages

IF YOU WANT to understand why most folks live longer than the life-expectancy tables suggest, why the typical family doesn't give a hoot about stocks and why most portfolio managers fail to beat the market, cast your mind back to grade school.

You might recall learning that there was more than one way to calculate an average. Most times, you add up all the observations, divide by the number of observations and get the "mean."

But as your math teacher no doubt explained, occasionally it makes more sense to use the "median," which you get by arraying the observations from highest to lowest and then picking the one in the middle. That way, you get an average that isn't skewed by a few unusually high or unusually low numbers.

But this stuff isn't just for kids. The mean and median diverge all the time-sometimes with intriguing financial implications.

One Life to Live: How long will you live? Consider some statistics from William Huff, an actuary at Seattle insurer Safeco Corp. According to one of Sarceo's life-expectancy tables, the average male life expectancy is 80.1 years.

But this average is a mean, which gets dragged down by folks who die young because of accidents and disease. What if you aren't so unfortunate? You may want to take your cue from the median, which is 83 years. Half of

men will die by this age and half after. Similarly, among women, the mean is 84.3 years, but the median is 87.

"If you want enough money to make it to death, you're going to have to plan for a higher age than the mean," Mr. Huff says. But even the median life expectancy should only be a starting point, he adds, because half of all people will live longer.

Unshared Wealth: "If you look at the aggregate data, households have more invested in stocks than in real estate," says Joseph Tracy, a vice president at the Federal Reserve Bank of New York. "But when you look at the typical household, they have very little in stocks and much more in real estate."

The reason: Stock ownership is concentrated in the hands of the wealthy. As of 1995, the median household-halfway down the wealth spectrum-had 66% of total assets in real estate and nothing in stocks.

Haves and Have Nots: Based on U.S. Census Bureau data, the mean household income was \$51,855 in 1998, but the median was just \$38,885. Meanwhile, according to the January 2000

Federal Reserve Bulletin, the mean family net worth was \$282,500 in 1998, while the median was \$71,600.

Why these big gaps? Because the wealthiest have so much money and the highest earners garner such big incomes, it skews the means upward, so that the means are much higher than the levels enjoyed by the typical family.

This imbalance can be seen in federal tax returns, says Frank Levy, a professor of urban economics at Massachusetts Institute of Technology. The top 0.3% of tax returns, he notes, accounts for some 12% of all adjusted gross income.

Missing the Boat: Most years, a majority of portfolio managers trail the market. A big reason is the drag from investment costs, including management fees and trading expenses. But the pattern of stock returns also plays a role. The market average (which is a weighted mean) tends to be driven higher each year by a fistful of stocks that post huge gains, so that the median stock lags behind the market.

Result? Each year, you end up with a minority of money managers who hold the year's hottest stocks and thus earn fabulous returns, while the rest miss out on the big winners and therefore trail the index.

The solution is to diversify even more. "The more names you hold, the greater the probability that you'll hold some of the big winners and so your returns will at least keep up the market," says David Ikenberry, a finance professor at Rice University's Jones Graduate School of Management in Houston.

Frenzied Few: Recent statistics suggest that folks are buying and selling stocks like crazy. But it turns out that this trading frenzy is largely confined to a small group of investors.

For instance, according to a study of trading through a large discount-brokerage firm over a six-year period, households turned over 75% of their stock portfolios each year, as measured by the mean. But the median turnover was just 32%, according to the study, which will appear in the April issue of the *Journal of Finance*.

"Yes, the tremendous turnover comes from a small group that trades a lot," says one of the study's authors, Terrance Odean, a finance professor at the University of California at Davis. "But even the average person appears to be trading more than they did five years ago."