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# Are Stock Markets Really Becoming More Short Term?

By Mark Roe

CAMBRIDGE – In a [recent commentary](#), I examined whether increasing pressure from more rapid stock trading is inducing corporate managers to obsess more over quarterly results, impairing their capacity to run their firms for the long term. But I noted how pressures from governments and rapid technological change are potentially just as powerful as those from stock-market trading. How carefully can one plan for the long term in, say, the eurozone, if the currency itself is at risk? And how long should brick-and-mortar retailers' time horizons be if distribution is moving online?

It is regularly argued (to the point of having become conventional wisdom) that cheap and easy portfolio reconfiguration, technical trading strategies, and investors' moves from one sector to another force managers to pay too much attention to immediate financial results. And, as trading accelerates, the pressures increase. But, even if managers and boards at publicly traded firms focus excessively on their quarterly results, and even if median stock-holding periods have shortened greatly in recent decades, it is difficult to know whether stock-market trading has become more rapid in ways that would make managers pay even more attention to quarterly results.

We must draw some very basic – but insufficiently recognized – distinctions about averages. One way to measure the average stock-holding period and its change over the past quarter-century is to add up all holding periods of all investors at the end of the year and divide the total by a weighted average of the stockholders. The result – the mean – is the average holding period.

Alternatively, we might line up all of the holders from shortest to longest and check how the holding period for the one in the middle has changed – the median. Often, these two ways to measure an average will have the same result and show the same rate of change. But when they differ, the difference should affect our thinking about the phenomenon. For stock markets, the difference may be important.

Consider something not involving stock trading. Imagine a suburb of Seattle with a population of 10,000 and an average annual *per capita* income of \$50,000 in 1970. By 1980, the average soars to \$100,000. What was the source of this spectacular increase? Was it superior education, good policing, infrastructure development, or something else? Can policymakers elsewhere study what the suburb was doing right and imitate it?

Now consider that mean wealth doubled in Redmond, Washington, as a result of Bill Gates' success. By 1980, his meager 1970 income of \$50,000 had increased to, say, \$50 million. Is it meaningful to say that average income in Redmond had doubled in the decade, when income was unchanged for everyone else? The median, unchanged over the decade, would better describe the suburb's average income. Whether Redmond's average wealth increased depends on how you look at it.

For stock markets, consider this possibility: 100 shareholders each hold 100 shares of the XYZ Corporation for three years. They sell their shares after holding them for three years to other investors, who in turn hold their shares for three years and then re-sell them. The average holding duration for each shareholder is three years.

Thereafter, 90 do what they have always done – hold for three years. But the other 10 sell their shares every four months to a new set of shareholders. One might be tempted to say that the average duration for holding stock in the XYZ Corporation was only 20 months, while in the good old days it was 36 months. In other words, holding duration was nearly halved. And, if we think managers are paying more attention than ever to quarterly results, we might think we have found the culprit.

But what is the best way to interpret the change in the holding duration for policymaking purposes? For 90% of the shareholders, nothing has changed and their holding period has not shortened.

This analytic problem is hardly unique to short-termism. When a distribution is skewed and not symmetrical around a middle value, the mean can fail to describe properly the population and its change over time. Emerging evidence suggests that this may well be the case in the stock market.

A team of finance economists – Martijn Cremers, Ankur Pareek, and Zacharias Sautner – [recently assembled data](#) examining a related issue. They find that holding durations for two of America's primary shareholders, Fidelity and Vanguard, have not budged since 1985. More broadly, the duration of holdings by mutual funds and pension funds – America's core stockholder class – *increased* during the quarter-century from 1985 to 2010. In 1985, the duration for stock holding in the United States was 1.2 years; by 2010, it had increased to 1.5 years. A fringe of rapid traders may well have greatly reduced the mean duration of stock holding, but, for the bulk of traditional American shareholders, the duration did not change.

These results fit badly with the typical argument that short-termism has increased in recent decades. Maybe the stockholder base was too short-term-oriented a quarter-century ago – maybe the original 1.2 year (mean) average holding period was too short. But, if American management has become more short-termist in the ensuing quarter-century and even more attentive to quarterly financial results, the reason does not seem to be a shortening of core shareholders' holding period. The media, corporate players, and lawmakers seem not to be thinking about the problem – and how to measure it – properly.