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OPINION

Great expectations

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Compared with safer investments, by how much should buyers of shares expect the stockmarket to grow?

RONALD REAGAN regarded economists as “people who see something work in practice and wonder if it would work in theory”. Economic thinking about share prices may be a case in point. Most normal people are happy to thank their lucky stars for the buoyant performance of shares, on average, both recently and over the long run. Economists, on the other hand, reckon that shares have done far too well for their theories to explain.



The mystery is as follows. According to the “efficient-markets” theory beloved of most financial economists, investors who take bigger risks should expect to be rewarded, on average, with higher returns. Shares are riskier than, say, government bonds, so it is not surprising that in most countries shares have, over time, generated higher returns for investors than have bonds. The puzzle is not that there is this “equity-risk premium”, but that it is so much bigger than it should be.

The puzzle was unearthed in 1985 by a pair of economists, Rajnish Mehra and Edward Prescott, who examined almost a century of returns for American shares and bonds. After adjusting for inflation, equities had made average real returns of around 7% a year, compared with only 1% for Treasury bonds—a six percentage-point equity premium. Given that shares are riskier (in the sense that their prices bounce around more) there should have been some premium. But theory suggested it should not have been much more than one percentage point. The extra five points seemed redundant—evidence of some inexplicable market inefficiency.

Economists have made many ingenious attempts to solve this puzzle. Some have, for example, argued that the stockmarket is riskier than a simple analysis of past performance might suggest. Others have produced psychological explanations, such as that investors are disproportionately averse to frequent short-term dips in share prices, and thus need higher expected returns.

The search for an answer to the mystery has now been joined by two of America’s most influential financial economists, Eugene Fama of the University of Chicago, best-known for his unshakable faith in efficient-markets theory, and Kenneth French of the Massachusetts Institute of Technology. In their new paper* they examine the relative performance of American shares between 1872 and 1999. Their conclusions challenge much of the conventional wisdom.

Strictly speaking, the equity premium is a forward-looking concept: the extra returns, on average, that investors in shares can expect to earn. But many studies of the equity premium have estimated expected returns using backward-looking performance data: the extra returns that investors actually earned. Yet it is possible that the actual performance of shares differed from investors’ expectations.

Messrs Fama and French tackle this problem by estimating investor expectations using a model based on how much investors could reasonably expect dividends to grow in future years. This assumes that, in the end, the value of shares is connected to the profit that companies generate, which eventually finds its way to investors in the form of dividends. They reckon this approach provides a reliable guide to expectations even though the number of American firms paying dividends has fallen sharply over the past 50 years. Many companies prefer, for tax reasons, to pass on profits to their investors by repurchasing some of their shares.

From their model, Messrs Fama and French calculate that, from 1872 to 1999, the expected equity premium over "risk-free" bonds averaged 3.6% a year, nearly 60% below the actual premium. This suggests that a large part of the equity premium is not puzzling at all: investors simply got lucky, and earned far more than they had expected. Most of this luck seems to have occurred in the past 50 years. From 1872 to 1949, the equity premium derived from the expectations model averaged 3.8% a year, not far below the actual 4.1% premium. But from 1950 to 1999, the expected annual premium averaged 3.4%, less than half the actual premium of 8.3% a year.

Not the economy, stupid

Why did American shares perform so unexpectedly well over the past 50 years? Messrs Fama and French examine three main possibilities. America's economy has done better than most people would have expected in 1950. This prompts them to echo warnings about the dangers of drawing general conclusions from the performance of American shares, which from a global perspective are an exceptional minority. However, the strength of America's economy does not account for the lower estimate of the equity premium, because it distorts their estimate as well as that based on realised returns. The two economists also rule out another explanation: that expectations of the long-term growth of dividends were higher at the end of the period than at the start.

The main reason why actual returns have diverged sharply from the average expected equity premium since 1950, they suggest, is that in the past few years expected returns have fallen sharply. All else being equal, the lower the expected return, the higher the current value of the share—in the same way as falling interest rates mean rising bond prices.

This explanation is not entirely convincing—most surveys of investors suggest that the bull market has raised expectations rather than dented them. The two economists are loth to enter the debate about whether America is now in the grip of an irrational stockmarket bubble. Yet their study certainly implies that sooner or later share prices will do badly, to bring expected returns back to their long-term average. That may be bad news for anybody relying on shares for their retirement nest-egg, even if it comforts those bothered by the stockmarket's ability to baffle economic theory.

*"The Equity Premium". Eugene Fama and Kenneth French, MIT working paper, July 2000.