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OPINION

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In praise of common sense

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What light does the modern theory of portfolio choice shed on the decisions of ordinary investors?

AT FIRST glance, the gap between finance theory and the advice typically offered to ordinary investors seems wide. The rules of sound investing, as laid down by most advisers (salesmen) working for banks, insurance companies and the rest, or by personal-finance pundits in the media, suggest that these experts have been too busy to open chapter one of any post-1950s finance-theory textbook.



Good news: it may not matter. The advisers' common sense has more going for it than you might imagine. It turns out that more advanced theories—which few economists, never mind investment advisers, have bothered to understand—endorse some of the salesmen's favourite rules of thumb, albeit for reasons unsuspected in head office.

The basic framework for modern finance theory is mean-variance analysis. This allows different investments to be compared in terms of the trade-off between expected reward (measured by mean return) and risk (measured by the variance of returns). An investor who cares only about these two properties will always prefer an investment that offers the highest mean return for any given amount of risk.

That may seem obvious—but it has some surprising implications. Cranking through the algebra—take this on trust—it follows that all investors will choose the same combination of risky assets. To the extent that investors differ in their fondness for risk, they will mix different amounts of zero-risk “cash” (short-term money-market instruments, such as treasury bills) with their chosen bundle of risky assets—shares and bonds. But the proportions of shares and bonds in the risky part of the portfolio will be the same for all. This is flatly at odds with the advice that is always offered to conservative (risk-avoiding) investors: hold more bonds and fewer shares.

Another article of faith for investment advisers is that young people saving for retirement should, other things equal, take more risk and hold more stocks than old investors. The idea is that time lets you ride out the ups and downs of the stockmarket. This is also the rationale for “buy and hold”—the stockmarket strategy often recommended to small investors.

Again, according to the basic theory, this is wrong. In the standard model, assuming among other things that the risk and return properties of different assets do not change, the investment horizon is irrelevant. The long-term investor should choose the same bundle of assets as the short-term investor.

So investment advisers don't know their theory of portfolio choice. Never mind. In “Strategic Asset Allocation” (published by Oxford University Press), John Campbell and Luis Viceira of Harvard University guide the reader (who will need a bit of maths) to the frontiers of pure and applied portfolio choice. Lo, much of the standard advice is redeemed.

First, cash is not riskless for the long-term investor, as the basic model assumes. This is because of uncertainty over the rates at which treasury bills and the like will have to be rolled over. The safe asset for a long-term investor is an index-linked long-term bond—or, if inflation risk is low, a long-term nominal bond. Just as cash varies in the simple model to accommodate different preferences for risk, the proportion of indexed bonds varies in a cleverer model for the same reason. The standard advice on asset allocation for conservative investors turns

out to be not too bad.

Second, shares are indeed safer over the long term than over the short term. Why? Because the evidence suggests that stock returns are somewhat predictable from dividend yields and other market information. Returns are mean-reverting: expected returns are lower when the market has recently done well, and higher when it has done badly. This mean-reversion violates the model's assumption of constant investment opportunities. And it lowers the risk of holding stocks over the long term. The investment advisers' guidance is vindicated again.

Here, though, comes a catch. The property that makes shares safer in the long than in the short term—mean-reversion—also refutes the rationale for “buy and hold”. In principle, the wise long-term investor should try to time the market, exploiting information in the history of share prices. Reduce your equity holdings at times (such as now) when prices are historically high in relation to dividends, and increase them when prices are low.

A third and very important complication also ignored by the simple model is that most investors have other sources of wealth—in particular, income from employment. This is equivalent to the income from a relatively safe financial asset, but with a twist. Its amount varies according to the investor's age: expected lifetime income from work is high when investors are young and dwindles to nothing at retirement. This means that the composition of wealth changes over time, even if choices about allocating financial assets stay the same. The long-term investor needs to rebalance his financial assets accordingly.

Labour income makes holding riskier assets more attractive, and the younger the investor, the stronger this effect. So the advisers are right again, even if they do not know why: young investors with secure jobs ought to be especially keen on investing in shares. Older investors, as well as investors with insecure jobs and investors with wages that are highly correlated with stockmarket returns, should be more conservative. Investment bankers fall into the last two categories, implying, paradoxically, that they should be among the most boringly cautious investors of all. So all is not lost: the theory does give one cliché a beating. “Leave stocks and shares to the professionals” is bad advice for professionals and amateurs alike.