tax advisory (when the Big Four are explicitly helping companies make money) can be in conflict with auditing (where the firms should take a wary, outside view of the books, in the service of investors not management). Lynn Turner, a former chief accountant at America's Securities and Exchange Commission, calls the audit firms a "public utility", but worries that they do not see themselves that way.

In 2002 the Sarbanes-Oxley act limited what kind of non-audit services an American accounting firm can offer to an audit client. But contrary to what many people believe, it did not forbid all of them. In its

last full proxy statement before being bought by JPMorgan, Bear Stearns reported paying Deloitte in 2006 not only \$20.8m for audit, but \$6.3m for other services. The perception that auditors and clients are hand-in-glove, fair or not, is a reason why shareholders of Bear Stearns sued Deloitte along with the defunct bank. (JPMorgan and Deloitte settled in June. Deloitte paid out \$20m, denying any wrongdoing.)

The European Commission in Brussels recently proposed taking a meat-axe to the problem. A draft directive provides for the creation of audit-only firms in the European Union. But the legal-affairs committee of the European Parliament does not like the idea. With the EU's legislative machinery slow and complex, it is impossible to predict the final outcome.

Asked what would happen if people perceived Deloitte as a consulting firm with an audit business rather than the other way round, Mr Salzberg replies: "we're not going to take our eye off our professional responsibility with respect to either." The future of the Big Four's business model may depend on whether lawmakers in Europe and America are convinced that this is possible. and galvad tud .blw

Buttonwood The secrets of Buffett's success

Beating the market with beta

FF INVESTORS had access to a time I machine and could take themselves back to 1976, which stock should they buy? For Americans, the answer is clear: the best risk-adjusted return came not from a technology stock, but from Berkshire Hathaway, the conglomerate run by Warren Buffett. Berkshire also has a better record than all the mutual funds that have survived over that long period.

Some academics have discounted Mr Buffett as a statistical outlier. Others have simply stood in awe of his stock-picking skills, which they view as unrepeatable. But a new paper* from researchers at New York University and AQR Capital Management, a hedge-fund adviser, seems to have identified the main factors that have driven the extraordinary record of the sage of Omaha.

Understanding the success of Mr Buffett requires a brief detour into investment theory. Academics view stocks in terms of their sensitivity to market movements, or "beta". Stocks that move more violently than the market (rising 10%, for instance, when the index increases by 5%) are described as having "high beta", whereas stocks that move less violently are considered "low beta". The model suggests that investors demand a higher return for owning more volatile-and thus higher-risk-stocks.

The problem with the model is that, over the long run, reality has turned out to be different. Low-beta stocks have performed better, on a risk-adjusted basis, than their high-beta counterparts. As a related papert illustrates, it should in theory be possible to exploit this anomaly by buying low-beta stocks and enhancing their return by borrowing money (leveraging the portfolio, in the jargon).

But this anomaly may exist only because most investors cannot, or will not,



use such a strategy. Pension schemes and mutual funds are constrained from borrowing money. So they take the alternative approach to juicing up their portfolios: buying high-beta stocks. As a result, the average mutual-fund portfolio is more volatile than the market. And the effect of ignoring low-beta stocks is that they become underpriced.

Mr Buffett has been able to exploit this anomaly. He is well-known for buying shares in high-quality companies when they are temporarily down on their luck (Coca-Cola in the 1980s after the New Coke debacle and General Electric during the financial crisis in 2008). "It's far better to buy a wonderful company at a fair price than a fair company at a wonderful price," he once said. He has also steered largely clear of more volatile sectors, such as technology, where he cannot be sure that a company has a sustainable advantage.

Without leverage, however, Mr Buffett's returns would have been unspectacular. The researchers estimate that Berkshire, on average, leveraged its capital by 60%, significantly boosting the company's return. Better still, the firm has been able to bor-

row at a low cost; its debt was AAA-rated from 1989 to 2009.

Yet the underappreciated element of Berkshire's leverage are its insurance and reinsurance operations, which provide more than a third of its funding. An insurance company takes in premiums upfront and pays out claims later on; it is, in effect, borrowing from its policyholders. This would be an expensive strategy if the company undercharged for the risks it was taking. But thanks to the profitability of its insurance operations, Berkshire's borrowing costs from this source have averaged 2.2%, more than three percentage points below the average short-term financing cost of the American government over the same period.

A further advantage has been the stability of Berkshire's funding. As many property developers have discovered in the past, relying on borrowed money to enhance returns can be fatal when lenders lose confidence. But the long-term nature of the insurance funding has protected Mr Buffett during periods (such as the late 1990s) when Berkshire shares have underperformed the market.

These two factors-the low-beta nature of the portfolio and leverage-pretty much explain all of Mr Buffett's superior returns, the authors find. Of course, that is quite a different thing from saying that such a long-term performance could be easily replicated. As the authors admit, Mr Buffett recognised these principles, and started applying them, half a century before they wrote their paper.

Economist.com/blogs/buttonwood

^{* &}quot;Buffett's Alpha", by Andrea Frazzini, David Kabiller and Lasse Pedersen, August 2012

^{† &}quot;Betting Against Beta", by Andrea Frazzini and Lasse Pedersen, October 2011