Your investments and why it's right to diversify

Giulio Renzi-Ricci – 5 May 2022

Two fundamental reasons underpin the strategy: risk and return

In volatile markets investors can be tempted to take a chance, trying to pick a handful of stocks they believe will benefit from any recovery, while avoiding those seemingly set to lose out.

But failing to diversify adequately can leave your portfolio less likely to hold the small portion of stocks that drive the market's long-term return and lead to poor performance.

Portfolio diversification is easy to understand. At one end of the spectrum, you can have a concentrated portfolio numbering just one security, or perhaps a handful. At the other end you can have a broadly diversified portfolio that can consist of hundreds, even thousands, of securities.

Diversifying investment portfolios is conventional wisdom for two fundamental reasons: risk and return.

The risk aspect is fairly straightforward. All else being equal, risk-averse investors do not like seeing the value of their investments fluctuate wildly.

By holding a variety of assets, which are not perfectly correlated with each other, investors can shield their portfolios from unwanted volatility. The lower the correlation between the asset classes, the stronger the diversification benefits. This is one reason why, over the past 20 years, portfolios composed of equities and bonds have delivered strong risk-adjusted returns, since equity and bond returns have tended to move in opposite directions.

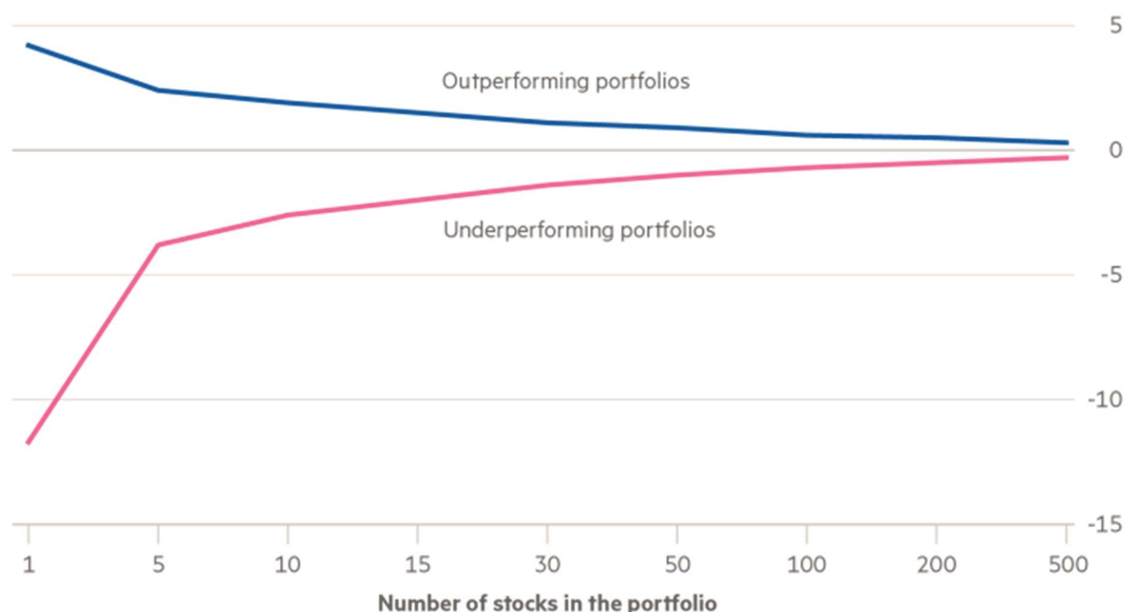
Diversification within asset classes also makes sense from the perspective of limiting risk. It lowers the impact that large falls in any one security will have on the portfolio.

What is less well understood are the implications of diversification for investment returns.

Let’s take equities as an example. Empirically, the returns of a broad equity market index, such as the US S&P 500, are driven by the high returns of a relatively small number of stocks. In recent years, this has meant tech stocks such as Apple and Nvidia.

Some investors might think that concentrated portfolios made up of their “best ideas” would be the surest path to equity market outperformance. The premise here is when a portfolio consists solely of a manager’s top picks, returns are undiluted by second-best or lesser ideas.

But the reality is different. Our research shows that concentration reduces the odds of owning the few stocks that drive returns. That is partly because it is hard to make successful investment calls, year after year. It is also because if investors get their calls wrong, it is much harder to recoup those losses and start earning positive cumulative returns.



Put differently, the high level of volatility associated with holding a handful of stocks leads to a drag on performance, compared with a portfolio composed of a larger number of holdings.

For example, imagine two portfolios, each with an initial value of £100. Portfolio 1, a low-volatility portfolio, achieves a +5% return in year one followed by a -5% return in year two. Portfolio 2, a high-volatility portfolio, achieves returns of +40% followed by -40%. Both portfolios have a return of zero, taking an average of the two years’ results.

But what matters to investors is the compounded return. While portfolio 1 has largely recovered its losses by the end of year two, reaching a value of £99.75, portfolio 2 will be valued at just £84. This impact of higher volatility on portfolio returns is often referred to as the **“volatility drag”.**

A simulation exercise that randomly selects stocks to create different-sized portfolio holdings shows that some portfolios outperform the benchmark while others underperform. However, concentrated portfolios are more exposed to the volatility drag.

For instance, based on our research, in randomly selected portfolios with five stocks, the average excess return (versus the Russell 3000 index) on outperforming portfolios is 2.4%; but for underperforming portfolios the average loss is larger, at 3.8%. The impact of that volatility drag recedes as the number of stocks in the portfolio increases.

How much diversification is enough? Portfolios of 10 or even 20 holdings are, in our view, too concentrated to give investors a decent chance of success. Only when a portfolio reaches 50 to 100 holdings do the odds move significantly in favour of returns.

Concentration can be bad for investors. It lowers the odds of owning the few stocks that drive returns; it also increases the odds of ending up with a highly volatile portfolio that could ultimately lead to poor performance. Diversification, by contrast, is conventional wisdom for good reason: it is an essential tool for reducing portfolio risk and it lowers the exposure of portfolio returns to the volatility drag.

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