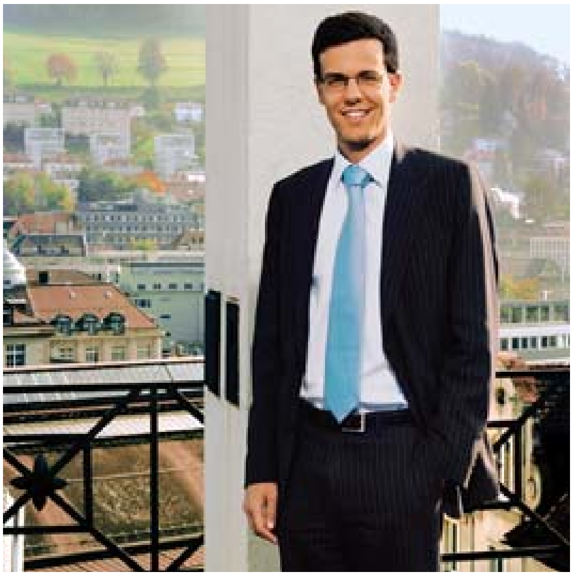
Putting performance to the test

Investment success is critical to wealth management, but just achieving a high return doesn't tell the full story. It's equally important to understand how much risk you are taking, explains finance professor Manuel Ammann



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On the face of it, investment success is straightforward. It is defined by positive performance, as this determines the level of assets a client holds and will continue to hold. Measuring performance correctly and professionally managing investment results is therefore a critical element of asset management. The biggest component in overall performance is return, which in this case means the relative performance of a portfolio over a given period.

Interestingly, returns do not have the same importance for all investors. While for many they are the sole criterion by which they judge performance, for others the return figure on its own means relatively little, so long as it is not negative. Still others say that the only thing that matters is having extra money in their account at the end of the year. If the outcome is satisfactory, or positive, it doesn't matter how it was achieved.

But performance just isn't that simple. All these measures fail to take account of one crucial factor: the future. A good return in a particular year might only have occurred because the manager took audacious risks and got lucky. Luck could just as easily desert that manager next year. Which means that returns are not in themselves sufficient to assess a portfolio's performance: an assessment of risk levels is a component necessary to judge overall performance.

Although returns can be generated with almost no risk, by putting one's money solely into 'risk-free' investments, such as bonds issued by financially strong and politically stable governments, once inflation has been factored in, there's often little real return left. On all other investments, returns can only be achieved by taking on commensurate risk. As

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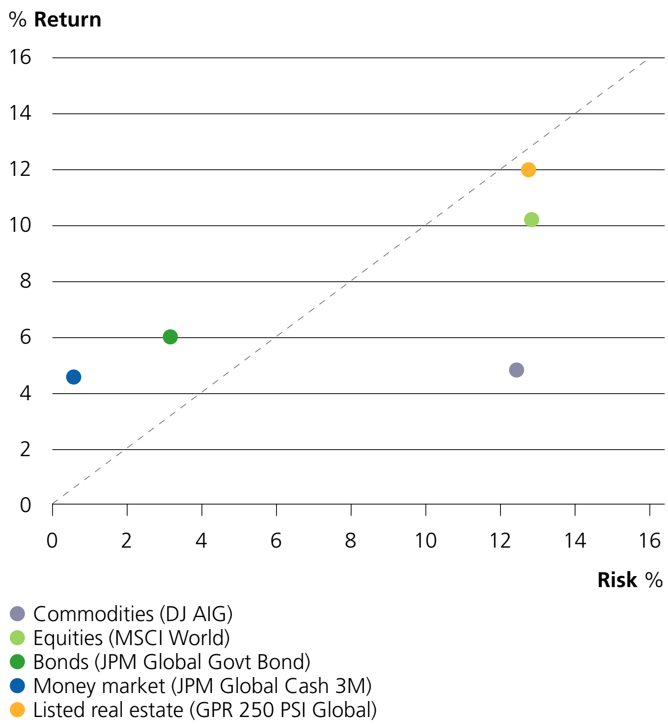
Risk pay-off varies



Source: UBS Wealth Management Research, data for the last 15 years from global indices

As a basic rule, investments can only generate higher returns by entering into greater risk. Looking back, however, we find that not all asset classes have repaid extra risk with additional return on the same scale. The risk-return properties of money market and bond investments over the last 15 years have been attractive. Although they have returned rather less than equities, the risk entailed was also much lower. Caution is in order however, as past returns are not indicative of future performance.

investors essentially want to achieve a high return at the lowest possible risk, the objective of any investment must be to strike the right balance between risk and return.

Sharpe ratio calculates risk-adjusted return

The Sharpe ratio, which measures return in relation to risk, is therefore a popular measure of performance. Strictly speaking, it does not use the entire figure for return, but only that portion over and above the risk-free return, as risk is only taken in order to achieve this excess return. The Sharpe ratio therefore shows the extent to which the risk assumed is rewarded with additional return. Volatility, or the fluctuation in returns, is the measure of risk. If a return of 5% is earned with 20% volatility on a risk-free interest rate of 2%, then the Sharpe ratio is 0.15 (3% divided by 20%). This means that each one percentage point of volatility is compensated for by an excess return of 0.15 percentage points.

The Sharpe ratio is a simple and absolute measure of performance, but it does have some shortcomings. For instance, Sharpe ratio comparisons between different non-diversified investments are problematic, as two non-diversified investments may have the same volatility but affect a portfolio's risk structure quite differently. Consequently, Sharpe ratio comparisons are only meaningful for diversified portfolios. For this reason, some variants on the Sharpe ratio have been developed, based on alternative measures of risk. Nevertheless the traditional Sharpe ratio is still the most widely used measure of performance in practice.

Alpha measures excess return

If one wants to compare the success of two investments, relative measures are needed. Alpha has become the standard here. It measures performance relative to a benchmark, taking account of risk. The benchmark may be an index or combination of indices. The first step in calculating an investment's alpha is to determine its systemic risk relative to that of the benchmark. This risk – known as beta or market return – cannot be diversified away in the portfolio construction process. Alpha is then the difference between the beta-adjusted benchmark return and the investment's actual excess return. Let's take an example: an investment has a beta of 1.5, meaning that it has a 50% higher systemic risk than the benchmark. If the benchmark's excess return (risk premium) is 4%, then the investment's excess return needs to be 6% to reward the additional systemic risk. If the actual excess return is in fact 7%, then alpha is 1%.

Performance data is always backward-looking, so the key question for investors is the extent to which past results can be extrapolated to future performance. This will depend on whether the performance posted was due principally to chance or to actual skill. As chance plays a much greater role in investing than it does in cooking, for example – it often

Timely, transparent information can provide the tools for judging performance

takes just one meal to judge whether someone is a good cook or not – a portfolio manager of no real talent can often have years of success simply by good luck. Conversely, it can take years for a good manager to be reliably identified as such on the basis of results. Chance can only be ruled out as a driver of good performance if alpha is positive to a statistically significant extent, in other words if the portfolio manager regularly beats the market over the longer term.

Only the future counts

So what might an investment strategy designed to produce positive alpha look like? Performance can be achieved through security selection, by weighting the individual investments in the portfolio differently to the benchmark. This results in positive alpha if outperforming investments are overweighted. Another way is to try to change the portfolio beta over time, so that it is high in market upturns and low in downturns. This is known as market timing. A number of methods can be applied to identify which actions by a portfolio manager contributed to the return achieved, and to what extent. As a general rule, portfolio construction – the country, sector, currency and investment style allocation – tends to have a much greater impact on performance than individual stock picking.

In developed markets, few investors are able to systematically produce positive alpha, as these markets are highly efficient and easily exploitable mispricings are a rarity. As a consequence, successful active portfolio management requires

Using GIPS standards

Global Investment Performance Standards (GIPS)* are guidelines designed to make performance more transparent for private investors. They contain ethical standards to ensure that asset managers calculate and report their performance fully and fairly. They are also intended to make performance data from different providers comparable. GIPS were introduced by the CFA Institute and International Performance Council (IPC) in 1999. GIPS are updated regularly.

Switzerland was the second country, after the US, to adopt GIPS. Standards such as these, have become commonplace in asset management for institutional clients, but not yet for private individuals. UBS was a pioneer in adopting GIPS for private clients in Switzerland five years ago. Each year since, its performance presentations have been certified by an independent company.

www.gipsstandards.org

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time-consuming market and company analysis, but the costs involved can often eat into performance. This means that once costs are taken into account, few actively managed funds are able to produce positive alpha. That would not be a problem for investors if these successful funds could be clearly identified, but in practice this is hard to do. The main problem is that a fund's past results are rarely a reliable guide to its future performance.

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There is such a thing as a free lunch: diversification

Unlike active portfolio management, passive investment does not seek to beat a benchmark. Instead, it is content to replicate it. Because the costs of investment in passive portfolios are lower, they tend to record better long-term performance than the majority of their actively managed counterparts. For most investors, it therefore makes sense to use broadly diversified index funds as a core investment and allocate only a fairly small share of the portfolio to actively managed satellite investments.

Correctly comparing performance

Simply by looking at returns, it is easily possible to see which investments have performed best – but only by comparing like with like. Investors should consider four points when comparing performance:

Asset classes: Each asset class, equities, bonds, hedge funds, real estate, commodities, among others, behaves differently in different market situations. Only comparisons within an asset class or between portfolios with similar asset allocations are meaningful.

Risk: Risk must be factored in when comparing returns. The Sharpe ratio, which measures return in relation to risk, is a useful formula: the higher the Sharpe ratio, the better.

Time frame: The value of an investment or portfolio is constantly changing, so a performance comparison is only useful if the periods covered are identical.

Costs: What an investor receives is what is left of the return once all costs have been deducted. One should therefore ensure that only net returns are compared.

Even if all these points are considered, one must never forget that the past performance of an investment is no guarantee of its future results.

Because it is so hard to identify the right time to invest in particular securities, it is all the more important to sensibly diversify one's investments. Diversification is sometimes described as the only free lunch on the financial markets, as it reduces risk without hurting returns.

Effective diversification can be achieved in a number of ways. One way is to divide a portfolio into different asset classes. In the case of core investments these are mainly the traditional classes of bonds, equities and real estate (where appropriate); satellites can include commodities, hedge funds and private equity. Depending on the asset class and the overall amount of the portfolio, diversification within a class can be achieved via a portfolio of direct investments or via indirect investments such as funds.

A question of scale

Diversification can also entail spreading investments across different regions, sectors and currencies. When investing in the various asset classes, one should also ensure that they are adequately diversified on these counts as well. It is also important to consider one's entire income and asset situation, not just freely investable assets. As far as possible, one's financial assets should balance any risks from assets that cannot be freely disposed of, such as one's own home or a stake in a company.

Because of the many small positions involved, it is generally more expensive to manage a broadly diversified portfolio than one that has little diversification, so the best policy in practice is to strike a balance between the greatest possible diversification and cost-effective management. For many investors, indirect investments are a good way of achieving sufficient diversification, but the costs must be taken into account if the positive effect of diversification on the risk-return profile is to be maintained. /