Investment risk from a client's perspective

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Introduction

Risk means different things to different people. It must be defined properly and measured correctly to make investment decisions that are aligned to a client's goal. From an outcome-based investment context, it is important that the investment risk is understood in terms of the client risk budget and their desired outcome or goal.

Investment risk is traditionally defined as volatility, or the average variation of price changes of investments. Intuitively this measures links variability of returns to risk – the more variable a return is expected to be, the less confident we are of what the outcome will be. While volatility is a useful way to describe risk for investment professionals, investors saving for a specific goal or targeting a predetermined objective do not think in these narrowly-defined mathematical terms. Investors tend to think of risk as the prospect of an undesirable outcome, such as a financial loss or not meeting an investment objective. These differences in perceived risk measures, the need for a defined understanding of client risk and integrating this into the managing investment portfolios appropriately are the focus of this article. It starts with a critical evaluation of traditional risk measures used most often in the investment management space and then discusses which are most appropriate in an outcome-based investment environment for a client.

Traditional investment risk measures

Volatility is probably the most well-known and widely used risk measure in the investment world. It measures the fluctuation of a stream of historical returns relative to the historical average. Even though it does give you a lot of information about the behaviour of a specific instrument, it is difficult to relate to and make sense of the number if you have a specific forward-looking goal in mind. What does a volatility number of 10% mean for an investor wanting to save for his child's university fees in 10 years?

Volatility also conflates the outperformance of an expected return with its risk, whereas investors are more concerned with underperformance relative to an expectation. In other words, investors are worried about the downside, not the upside but volatility sees both as equally important sources of risk. Downside deviation, semi-deviation and loss deviation are all derivations of volatility, except that these measures focus on suffering a loss. They thus eliminate some of the pitfalls of volatility as they isolate the 'bad' fluctuations and therefore higher values of downside-, loss- and semi-deviation would typically be bad experiences for investors.

Tracking error as a risk measure

Another commonly used risk measure is 'tracking error'. This measures the deviation away from a predefined benchmark, that is by how much the return stream differs from the target against which it is measured. In some ways this measure is poorly named; it suggests that the bigger the number the more significant the mistake! Often, however, the deviations away from the benchmark are deliberate and therefore not an 'error', but rather a way of adding potential value (in a benchmark-relative way). The biggest shortcoming of tracking error as a risk measure is thus that it does not distinguish between 'bad' tracking error and 'good' tracking error. In other words, if a return stream is constantly ahead of the target against which it is measured, and by a fair margin, tracking error will be high, whereas tracking error will be low if a return stream only marginally underperforms the target constantly. Therefore, it is dangerous to conclude that high tracking error is bad and low tracking error is better. In fact, tracking error is necessary for outperformance and more potential outperformance typically requires more tracking error.

Value-At-Risk as a risk measure

Maximum drawdowns, Value-At-Risk (VAR) and other risk-adjusted measures like Sharpe and Sortino ratios are again mathematical risk measures, which are a step in the right direction to answering the true meaning of risk for an investor with a goals-based mindset. However, they are still imperfect or at least should not be looked at in isolation. These would only be useful if interpreted correctly and measured relative to the goal in mind. Thus, the effect or meaning of a historical drawdown should be interpreted within the context of the targeted goal. VAR is an extremely meaningful measure of a client-orientated risk and perhaps most appropriate in a goals-based investment framework, but only if the potential for capital loss (as measured by VAR) is a concern from a client's perspective over the short term, or, if VAR is assessed relative to the goal over the appropriate time frame. In other words, it is a different and effective way of defining a possibility of shortfall or not delivering on the goal.

In short, all these measures have their specific shortcomings. The output and its understanding is just as important as the inputs that it is based on. The measurement period also plays an important role in interpreting the outcome.

Important investment risks to consider

Other than the typical quantitative risk measures discussed above, there are also many other investment risks that are intangible and not easily measurable and yet could also influence the outcome of an investment portfolio. Investments and investment strategies across asset classes are also exposed to these risks. With careful and expert consideration these should also be taken into account, as they could considerably influence the level of VAR in the client portfolio. These qualitative risks would typically include the following:

Country	The risk that specific country events will weaken a country's financial standing and influence investment markets.
Credit	The risk that a bond issuer will forfeit repayment of interest and capital.
Currency	The risk that fluctuation in currency exchange rates causes the value of an investment to decline.
Liquidity	The possibility that an investment might be difficult to buy or sell.
Management	The possibility that an investment will underperform due to poor investment decisions by theinvestment manager.
Sector	The risk that a particular sector within a market may decline in value.
Instrument	The risk that a specific share invested in performs badly due to unforeseen company specific risks.

Even though it is difficult to predict specific instances of these types of events, it is still important to understand their effects on a portfolio, if they should occur. Sensitivity analysis of reasonable shock assumptions around these risks, possibly combined with some scenarios, gives the investor some idea of a possible worst-case outcome.

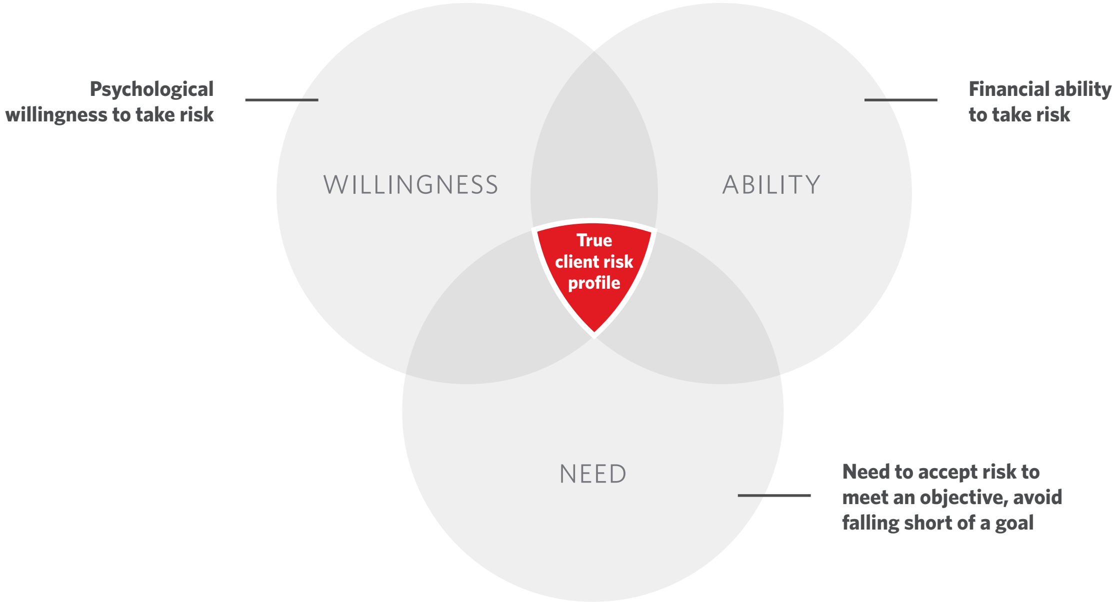
Outcome-based risk framework

In an outcome-based environment, it is essesntial to continually assess and understand these possible effects to ensure the path to the goal is not severely affected due to unforeseen events. Risk management is effectively about ensuring the unforeseen events do not destroy value that has been created or prohibit the client from ultimately achieving the goal.

Clients' goals or investment objectives cannot be formulated if the return requirements and the holistic risk constraints are poorly understood. Most clients do not fully grasp what their own risk profiles are or what amount of risk is required to deliver on an intended goal. They typically understand and know what they would like to achieve, but seldom understand what it means from a risk perspective to deliver on the goal. It is therefore our duty as investment professionals and advisers to assist clients in making the right investment decisions for their specific needs and to ensure they understand what the risk undertaken can mean in practice.

To this end, their risk profile must be established. This is usually defined on a behavioural basis along three dimensions illustrated in figure 1. By understanding the true client risk profile and marrying that to the investment goal, a more informed and aligned investment portfolio can be designed, monitored and steered along the path to the successful delivery on the objective with a high degree of certainty.

Figure 1: True client risk profile



https://www.vanguard.co.uk/documents/portal/literature/investment-risk-guide.pdf

For most investors with a goal in mind, risk can be either the probability of not delivering on the goal, the erosion of the purchasing power of their capital over time, or the loss of capital. It could even be a combination of all three. These measures are tangible, well understood and built into our investment process.

Momentum Outcome-based Solutions strives to deliver on client objectives in several specific ways. Firstly, it attempts to design a solution with the highest probability of achieving the objective. Secondly, it tries to minimise the extent of the underperformance, should it occur. To do this successfully over time, it is important to embed the risk profile and risk requirements of clients as part of the process of portfolio construction, align the investment risk taken to this risk budget as well as understand the implications of getting investment views wrong or a black swan event coming to the fore.

Conclusion

In the traditional sense of the word, risk in investments is measured in a mathematical sense based on a historical return profile. All these quantitative risk measures have a place in the investment process if understood, interpreted and applied correctly. Much of academic theory, practical applications in finance and pricing of insurance-type investment instruments revolve around these mathematical risk measures. This is all good and well but misses a very key insight: Risk is not equal for all investors.

Clients with capital invested in an investment portfolio can and will most likely have a very different definition of risk, especially if capital is invested to achieve a specified goal. The probability of not delivering on the goal, preserving purchasing power of capital and capital losses is much more relevant and tangible in these investors' lives. These risks also alter through time as personal circumstances change and therefore should be adapted accordingly, alongside the choice of investment product.

Momentum Outcome-based Solutions strive to understand the true risk profile of clients, building these risk profiles into the design and construction of the client portfolios, understanding the sensitivities to real-world unforeseen risks and monitoring and managing the risk relative to the desired outcome. By ensuring the probability of shortfall relative to the goal or objective is minimised as the client's investment journey is played out, the company can realistically deliver on its client promise.