

The alchemy of risk (and communicating risk to clients)

By Quintin Rayer | April 19, 2018



In this article Dr Quintin Rayer looks at issues around risk in financial products; the forms risk may take and the difference between perceptions of risk and reality [1]. An illustration is used to explore the challenges of assessing different forms of risk. Advisers must be careful about the impressions of risk levels that they communicate to clients.

Introduction

Advisers and wealth managers play an essential role when communicating product risks to their clients. Many products have been developed that appear to lower risk, perhaps by reducing apparent volatility. However, on closer examination, these may bear higher risks elsewhere.

It would be easy for advisers to promote assets with apparently low volatility for the expected levels of return as 'lower risk' to clients; however, risk appears in many forms [2], [3]. In many cases, it seems that rather than being eliminated, risks have been transferred to other forms. This can occur in ways that may seem less obvious – hence the title of this article – it sometimes appears that risk can be transmogrified as if by some alchemical process [1].

A visual image is to think of total risk as being like a balloon – with areas on its surface labelled as ‘volatility’; ‘credit risk’, and so on. If a product’s risk balloon (for a given level of return) is squeezed to diminish volatility, it suggests that the balloon must bulge out somewhere else, perhaps at ‘credit risk’, or ‘counterparty risk’.

As a result, products that may be regarded as delivering similar returns but at differing levels of apparent risk should be scrutinised carefully to see how this has been achieved. For products with similar anticipated outcomes, a useful approach can be to assume that actually, the risks must be similar, but just taking different forms. An adviser can then gain insight by asking the question ‘where has the risk been moved to?’. The following example illustrates the idea.

Different forms of Risk

Consider three simplified fictitious products, all of which we suppose offer similar expected returns of around 4-5% or so, annually.

1. A large fund, thoroughly diversified by region and asset class.
2. A company offering an actuarially ‘smoothed’ return based upon investment in its underlying large multi-asset fund, with lock-in periods and periodic bonus payments.
3. A well-diversified portfolio of assets with guarantees that the value cannot fall below 80% of the initial investment, for a small premium (which it is assumed does not materially affect the returns).

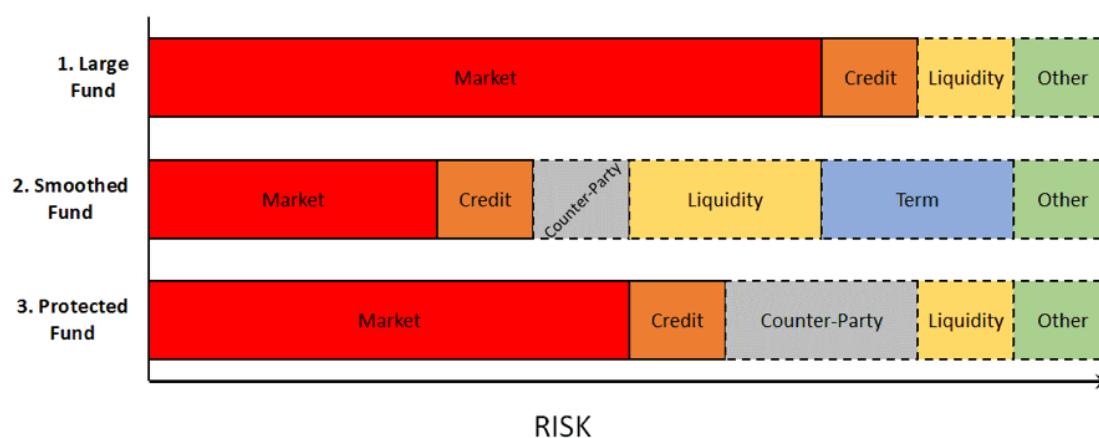
For the well-diversified fund, there would be a degree of volatility in quoted fund prices, which is market risk. The fund also carries a range of other risks, such as credit risk if it includes bonds, liquidity risk if some assets are not immediately saleable and so on (see figure below).

Turning to the second product, smoothing means this may have low volatility. But how has this been achieved? The company offering the product has a large underlying portfolio of assets. For simplicity we assume these to be like the well-diversified portfolio of the first case. During good times the company then puts assets on one side (reducing the investment return), and uses these during bad times to smooth returns. This depends on the financial strength of the company in question – market risk has been replaced with counterparty risk. Even if the company has a large pool of assets set aside, this risk is still present in some form.

Further, the lock-in periods present the investor with liquidity risk (if they need to encash their investment early) and term risk since they must remain invested long enough to receive the bonus payments. The lock-ins may also increase counterparty risk by keeping the investor exposed to the product for longer than otherwise.

In the third case, there may be volatility in the portfolio, as in the first case; but this is capped at 20% downside since 80% of the initial investment value is guaranteed. But how is this guarantee accomplished? The sponsoring company may use its own financial muscle (adding counterparty risk), or it could use derivatives to lay off the risk.

If derivatives are used, these could be over-the-counter, which means the risk has been sold to a limited number of other market participants (also counterparty risk), or else exchange-traded derivatives could have been used. Exchange-traded derivatives may permit the nearest thing to the elimination of risk because they are guaranteed by the exchange. But what this means is that the risk of failure has been thinly spread over all market participants, rather than removed.



How this helps Advisers

As a thought process, this approach helps advisers appreciate that a degree of risk may be unavoidable, however choices can be made about which kinds of risks to accept. Apart from being a useful mind-set for advisers and wealth managers, these are important messages to communicate effectively to clients to ensure they properly understand the implications.

By making sure their clients appreciate how the different types of risk may impact outcomes, advisers will be helping ensure they select the products most suitable for their clients and demonstrating how they are adding value in investment decision-making.

References

- [1] Q. G. Rayer and W. Dickson, "Hypothesis: Risk, like Mass and Energy, Can Neither be Created nor Destroyed. Discuss," *CISI, The Review of Financial Markets*, no. Issue 13, Quarter 2, pp. 6-8, 2017.
- [2] M. Choudhry, *An introduction to Value at Risk, London: Wiley Publishing (with CISI), 2013.*
- [3] M. Crouhy, D. Galai and R. Mark, *The Essentials of Risk Management, 2nd ed., New York: McGraw-Hill Education, 2014.*

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