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Sixty second summary

Structured equity: back to basics

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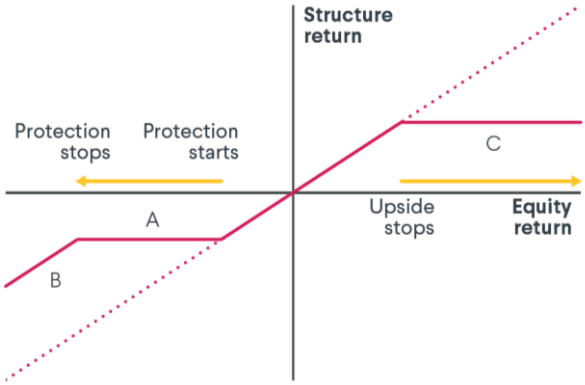
With considerable uncertainty on the outlook for future equity market returns, is now the time to adopt a "solution" that protects against an equity market sell-off, while still participating in market upside? "Maybe" is the answer, but like all investments, it is important to understand such solutions in more detail and consider how they might fit with your objectives and governance. In this 60 Second Summary we discuss "Structured equity" (often referred to as "Equity protection") in more detail. This follows up on other articles we have written on this subject over recent years ("Why sell equities to reduce downside" Q1 2015[1] and "Predictable returns from equities" Q1 2018[2]).

Structured equity – the toolkit

Structured equity allows investors to restructure their equity return profile to their specific needs using equity derivatives, in particular options. By way of a reminder, options carry the right, but not the obligation, to buy or sell a stock or an index at a specified date in the future at a specified price. The most common solution considered is referred to as a 'put spread collar'. The key objective of this strategy is to keep investing in equities, but to buy some downside protection and pay for the premium by giving away some of the upside if equity markets rise more than expected (which is equivalent to de-risking if equity markets rise).

The payoff diagram of an example put spread collar (PSC) at expiry is shown in the chart on the right.



The PSC has three components:

A Buy a put option, to protect equity return below a certain level by paying a premium.

B Sell a put option, to remove the protection below a level lower than the floor to cheapen the premium.

C Sell a call option, to give away equity return above a certain level to further cheapen the premium.

As is often the case, the level of upside given away by the call option can be chosen such that the premium from the overall structure is nil. However, it would be equally valid to consider a PSC with a non-zero premium, particularly if there is a desire to retain more upside over the term of the option or if there was some asymmetry in pricing.

[1] https://www.hymans.co.uk/media/uploads/150203_Investment_perspectives-final.pdf

[2] https://www.hymans.co.uk/media/uploads/Investment_perspectives_-_spring_2018_final.pdf

What should LGPS Funds be asking themselves regarding structured equity?

Is this a part of a decision to reduce your Fund's risk for the longer-term?

Over the long-term vanilla equity protection portfolios are expected to generate returns similar to a portfolio of equity and cash, i.e. dampened return and dampened volatility. Could you achieve similar long-term strategic benefits by selling equities and investing the proceeds elsewhere? Could the structured equity solution be designed to replicate expected returns from alternatives e.g. if we assume equities have a risk premium of c.3-4% p.a., with volatility of c.18%, designing an equity protection portfolio with a risk premium of (say) c.2-3% with lower volatility might act as a reasonable proxy for some alternative investments (even as an interim holding period while alternatives are being funded or if the alternatives are considered expensive).

Is this a part of a decision to reduce your Fund's risk for the short or medium-term?

There are a number of governance related aspects to consider such as, why make this decision now, on what grounds will this decision be unwound, are there plans to roll the hedge, how will success of the decision be measured? If the decision to implement the solution is linked to an upcoming valuation, how does it fit with the Fund Actuary's approach to setting contributions and managing contribution volatility? Do you already have some protections "baked in" e.g. contribution stabilisation or long-term modelling of contributions meaning that the funding level on and around the valuation date is not a critical point in terms of the Fund's long-term future success? If so, does the proposed solution really add much to the Fund's risk management arrangements?

What is the impact on return?

The chart on the previous page illustrates that the return profile of the PSC (the solid pink line) is quite different from that of holding equities alone (the dotted pink line), and in practice, this profile can be tailored to meet a pension fund's specific needs. The actual return achieved on the option strategy may be higher or lower than the market return for any given equity market outcome. However, options are not a free lunch. Even if an option strategy is sold as 'nil premium', it will typically cause a slight drag on the average expected return reflecting the price of the options (i.e. nil premium does not equal nil cost as there are transaction costs charged by the banks and the median expected return is not the same as the mean expected return). In addition to the price at time of being implemented, it is also important to consider how the value of an option strategy may change in response to changes in market conditions, such as an increase in equity volatility.

What about the governance?

There are governance aspects to be considered, but these should not be seen as the sole barrier for considering such an investment, if the other features are viewed positively. Questions to consider include, how does this fit with the Fund's cashflow needs (e.g. an equity market rally is likely to need cash collateral to be posted by the Fund), what is the approach to appointment of a provider e.g. is an OJEU search required or not? What are the fees that will be paid (many providers typically have a minimum fee regardless of mandate size). What monitoring arrangements are needed? What training is needed for our elected members?

Summary

Equity options allow investors to convert equity investing into a more predictable return profile. However, the relevance of using structured equity over other strategies that aim to deliver more predictable returns will depend upon a number of factors e.g. objectives, time horizon, market conditions etc. For example, we have a number of private sector pension funds, working towards buy-out with defined recovery plans, who have structured equity strategies in place to meet specific objectives – to help meet a specific downside stop-loss associated with covenant/funding and control volatility. For LGPS Funds, we understand some are considering using it to protect the position up to the 2019 valuation and then unwind. This will prove vindicated if equities sell off. However, this could be costly if markets go up more than the strike on any call option used to pay for the protection. It is particularly important to consider how your valuation/contribution setting process works to get a sense of what protections you already have in place.

Structured equity is worthy of consideration; however, alternative de-risking solutions exist. If a structured solution is to be used, it must be tailored to the specific requirements of the Fund. Please speak to your investment consultant for further information.