

A guide to fixed income for pension funds – Part 2

In *A guide to fixed income for pension funds Part 1* we saw that while investments in government and corporate bonds have traditionally dominated fixed income portfolios, pension funds should consider the diversification benefits of opportunities beyond these traditional bond investments. This requires careful consideration of whether the additional premium received on less liquid assets compensates for the additional risk. We considered High yield bonds, Emerging Market Debt and Asset Backed Securities (ABS) as examples of opportunities which could enhance the returns of a bond portfolio without necessarily a commensurate increase in risk.

This edition considers the role and use of derivatives in a fixed income portfolio. As with anything derivatives can seem complicated to those that are not familiar with them but at their most basic level they are contracts that allow investors to take or remove exposure to the price of an underlying asset such as stocks, bonds or commodities.

Derivatives have been used by bond managers for many years. One major reason for this is that a bond is a rather crude instrument. When you buy a bond the yield you receive is largely driven by the yield on the underlying (risk-free) government bond, with an additional premium for the asset, the sector and ultimately the individual issuer of the bond. Derivatives are used to hedge risks (currency risk, interest rate risk, default risk, etc), target risk (at the specific component of a bond where conviction is greatest), reduce cost (as derivatives are usually cheaper to trade than the underlying assets) and improve returns.

In addition to bond futures and currency forwards, pension funds investing in bonds are increasingly using swaps. An interest rate swap, for example, is like a fixed interest bond where you receive a series of fixed interest payments on a notional amount over a defined period, except you don't loan any money up front and you don't get any back at maturity. Instead, you pay the floating (variable) interest rate that would be earned on that notional amount if it were sitting in a bank account. However, you are free to invest that notional amount wherever you wish, as long as you can achieve at least the floating rate of interest payable under the swap.

These features makes swaps very attractive to pension funds looking to reduce the impact on their funding level of fluctuations in long term interest and inflation rates. These 'liability driven' strategies usually employ interest rate and inflation swaps to give the scheme exposure to 20, 30 and 50 year interest rates and inflation in exchange for paying a 3-month Libor rate of return, whilst retaining the ability to earn additional returns.

Pension funds are increasingly also using derivatives to hedge, isolate or exploit credit risk in their portfolios. They do this using credit default swaps (CDS), which are very similar to the swaps we discussed earlier except the payments are contingent on the health of the referenced corporate/issuer. Fundamentally, a CDS is similar to an insurance contract, providing the buyer with protection against the risk of a corporate defaulting. Selling CDS protection is very similar to holding a corporate bond, where you expose yourself to the default risk of a company, in return for a premium. It is important to remember that bonds hold more downside risk than upside, if a bond defaults the holder will usually be left with nothing, yet prices can't rise limitlessly (as opposed to equities which can go up or down more symmetrically).

CDS allows a manager to isolate the specific corporate risk, instead of having to buy the more crude underlying corporate bond, so you can pinpoint exposure to just the corporate's ability to repay its debt without getting exposure to the rest of the sector or market.

Bond fund management is evolving rapidly, but these new assets and instruments need not be a cause for concern or suspicion. Once understood it becomes possible to design a set of guidelines that ensures they are used appropriately to maximise returns, whilst minimising risk relative to a scheme's benchmark or liabilities. We will look at this in more detail in next week's article.

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