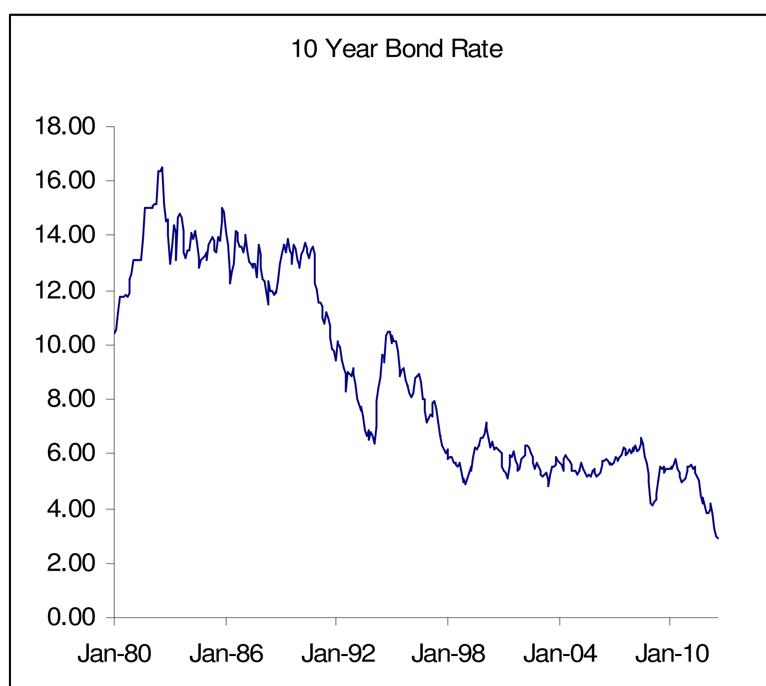
Yes: Bonds are Risky Too

Christopher Joye (AFR, 14 August) argues that the investment strategies of Australian Super Funds, with their heavy weighting towards equity, have been built on shaky foundations. In particular he takes aim at the conventional wisdom that the expected return on equities provides a significant premium over the risk free rate on bonds.

If that is not the case, the higher risk of equities (volatility of returns) has been taken by super funds without sufficient benefits in the form of higher expected returns. And if that is the case, members should be voting out the trustees and management of their super funds for implementing bad strategies. But, of course, superannuation governance doesn't work that way – but that is another story.

With the benefit of hindsight, that wonderful analytical tool, we would all have adopted different investment strategies over recent years. Shifting from equities to bonds could have given a double whammy to overall returns under some trading strategies.

Not only have equity returns been abysmal in some years, but long term government bond rates have been on a downward trend for thirty years, as the accompanying chart indicates. Good returns were there (in hindsight) if an investor had been smart enough to buy long term (10 year) bonds, sell them a year later when interest rates had fallen, and then reinvest in 10 year bonds and keep repeating the strategy.



The reason for the good returns is that as interest rates fall, the price of existing long term bonds increases giving capital gains upon sale. Of course, this is a risky strategy – interest rates might subsequently go in the other direction – and the chart shows that this was indeed often the case.

Consequently, good returns on the "bond rollover" strategy were accompanied by relatively high risk, as Christopher Joye finds. Not as much risk, nor quite as high a return as from investing in equities though. And on those numbers, the question can be raised of whether the game played by our super funds was worth the candle?

But they were not, and should not have been, playing the alternative game. Super funds should be long term investors. A "bond rollover" strategy involves taking the capital gains when rates fall, and reinvesting in now lower yield bonds. That might turn out to be good, if rates fall further, but if they don't there is now a lower annual yield than if the original bond had been held.

In hindsight, the alternative risky "bond rollover" game was worth the candle – and perhaps smart investors should have seen the downward trend in long term government rates. But that is a completely separate issue from what is the expected return on risky equities relative to passively investing in risk free assets.

That equity (or market risk) premium (over the 10 year government bond rate) has been calculated using long term historical data to be around the six per cent p.a. mark. Tim Brailsford, John Handley and Krishnan Maheswaran have provided such calculations in a recent article in the journal *Accounting and Finance*.

But it is worth noting that those calculations compare (as is commonly done) the annual return on equities with the yield to maturity on 10 year bonds (at the start of the corresponding year). That does not necessarily provide good information on a suitable investment strategy. It tells us (if we believe that historical information is relevant, and we have no other valuable information) how much the expected return on an equity investment exceeds the current 10 year bond yield to maturity.

It is indeed an apples and oranges comparison, as Christopher Joye remarks, which does not include possible capital gains or losses on bonds which are not held to maturity, by implementing the risky strategy which I describe as "bond rollover". That worked well over the past three decades (in hindsight) because of the downtrend in interest rates. The market (or equity) risk premium is meant to give the expected

differential between a risky (equity) investment and a risk free investment (which the "bond rollover" strategy is not).

A more interesting calculation is to ask what would be the expected difference in returns from investing in equities rather than from adopting a "risk free" investment strategy. Ideally this would involve comparing the annual return on equities with the yield to maturity on a one year government bond.

Unfortunately, we don't have readily available data on one year bond yields, but Brailsford et al provide something similar – the annual returns from investing in a sequence of 90 day Treasury notes or Bank Bills. Lo and behold, over the period 1980 to 2010, the premium in equity returns is again very close to 6 per cent.

With hindsight, the risky trading strategy involving bonds may have done very well on a risk adjusted basis relative to investing in equities. But without hindsight, a strategy of investing in a "risk free" manner in government bonds would have underperformed equities quite substantially.

None of this is to say that Australian super funds may not be too heavily biased towards equities rather than bonds. But at the moment, with 10 year bond rates below 3 per cent p.a. there is little scope for interest rates to decline much and generate future returns like the past good returns on the risky bond rollover strategy.

And bonds ain't just bonds. If Australian super funds had invested heavily in corporate bonds or other structured "fixed interest" products, the blow out in credit (default) spreads (and resulting plummeting in prices) at the time of the financial crisis might have led to even worse returns. And if they all were competing for the scarce supply of Australian Government Bonds, even 3 per cent might start to look high!

Professor Kevin Davis

Research Director, Australian Centre for Financial Studies

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