Volume 44 //

Acuity

The greatest wealth is **your peace of mind...**

Sensible investing.tv

The name's Bond. Investment Bond.

“You don't need bonds, until you need them!”

Anon

Bonds are a very important part of most investors' portfolios, providing lower absolute levels of volatility than equities, and protecting portfolio values from periods of severe equity market trauma that occur from time to time. Owners of bonds should be prepared for unexciting returns going forward as we – potentially – move to a better world of higher yields. No one knows when or how quickly this will happen, so trying to second guess the guessers is a fool's errand. Nevertheless, the reassuring thing about bonds is that, just like 007, they are there when you need them.

Challenging times

Today, investors face some challenging choices when it comes to investing in bonds, not least because yields on bonds are at historical lows and currently below that of UK inflation. Too many investors, as a consequence, have been tempted to chase higher yielding bonds, in an attempt to squeeze some return out of what feels like an unproductive portfolio allocation. This is, unfortunately, an accident waiting to happen. The phrase ‘picking up pennies in front of a steamroller’ comes to mind.

Others are asking whether they should be holding cash as bond yields are ‘inevitably’ going to rise, denting bond returns, at least in the short term. This has been a theme, on-and-off, for almost a decade since the era of low yields began, driven by quantitative easing by the Bank of England in response to the Credit Crisis. Those taking the cash deposit route over this period have paid a heavy price, losing 15% of purchasing power compared to just 3% from being invested in short-term government bonds (hedged to GBP)[1]. Second guessing interest rate movements is notoriously tricky and placing deposits instead of owing bonds achieves nothing for the long-term investor, as we shall see.

This volume of Acuity explores the issues facing investors and how we can make sensible choices which, while they may not seem very exciting, will get the job done when needed.

The challenge is to make decisions today that will help to protect and build wealth over time and, most importantly, allow investors to remain invested in the markets at the worst of times.

Why own bonds in the first place?

By-and-large, an investor's emotional and financial ability to cope with falls in equity markets, which at times can be stomach-wrenching, determines how much equity risk they can take on. Very few investors have the stomach for a 100% equity portfolio. The table below summarises the worst five global equity market falls since January 1970. Ouch!

Peak date	Decline	Trough date	Recovery date	Decline (m)	Recovery (m)
Sept-00	-49%	Jan-03	Dec-10	29	95
Jan-73	-40%	Sep-74	Jan-76	21	16
Jan-90	-35%	Sep-90	Jan-93	9	28
Sep-87	-29%	Nov-87	Mar-89	3	16
Jan-70	-19%	Jun-70	Jan-71	6	7

Table 1: Worst 5 equity market crashes

Data: MSCI World Index (net. div.). Source: Morningstar Direct © Copyright. All rights reserved (see endnote).

Investors who cannot, emotionally or financially, afford to suffer these types of falls in value have to take some of this equity risk off the table and own more stable – and thus lower returning – bonds to offset these falls. Think of this as buying an insurance policy against such falls, where the premium paid is the difference between the expected return on equities and bonds, perhaps being somewhere in the region of 4% or so, over the longer term.

When bond returns are very low, and equity markets are going up,it is easy to forget the old adage 'you don't need bonds until you need them!'; and either wish you owned more equities, or that your bonds were working harder. The figure below illustrates the impact of adding high quality bonds to UK equities, for example, during the Credit Crisis. The impact is material and a reminder of their value to a portfolio.

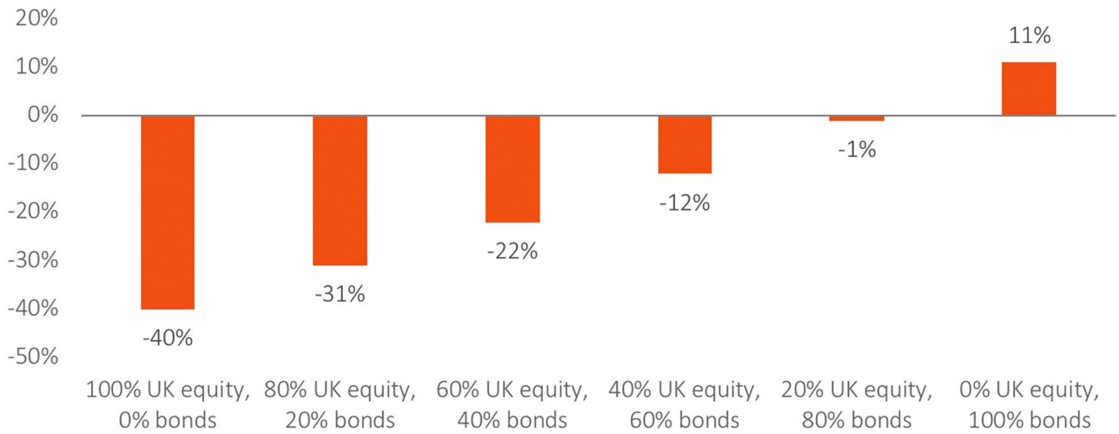

Figure 1: Adding bonds helps reduce downside falls – Credit Crisis (Nov-2007 to Feb-2009)

Data: Nominal returns. MSCI UK Index (net), Citi WGBI 1-5 Years (hedged to GBP). No costs of any kind deducted. Rebalanced annually. Source: Morningstar Direct © Copyright. All rights reserved (see endnote).

Very cautious investors may hold material allocations to bonds to avoid large falls in portfolio value and to generate income. For them, inflation is the big, long-term risk that they face. The brutal reality of investing is that no portfolio is ever risk-free. For example, holding cash on deposit since the Credit Crisis has resulted in savers losing around 15% of their purchasing power, which will only be clawed back slowly once interest rates are higher than inflation, whenever that eventually occurs. It is instructive to note that a portfolio with 40% equities and 60% high-quality bonds (previous page) fell by roughly the same amount but would have gained 12% by the end of April 2018 after inflation (43% before inflation), compared to cash still being 12% down in purchasing power terms. Which is the riskier portfolio?

A quick recap on how bonds work

In short, bonds are IOUs (i.e. a debt instrument) issued by companies and governments in order to raise capital. They are bought by investors, who are, thus, acting as lenders. Investors in bonds include individuals, bond unit trusts, pension funds and insurance companies, to name a few. Bonds pay a fixed rate of interest, in cash, to the investor each year - known as a 'coupon' - and promise to repay the principal amount borrowed at a specified 'maturity' date.

The relationship between price and yields

In bond market parlance, the return that an investor expects to receive, on average per year over the lifetime of a bond, is known as its yield[2]. At the time the bond is issued, the yield is more-or-less equivalent to the bond's coupon. Thereafter, changes in the yield demanded by investors, to compensate for the changes in risks faced, result in changes to a bond's price. This is because the coupon (rate of interest) is fixed throughout the bond's life and the only moving part of a bond is its price[3]. If yields rise, bond prices fall. If yields fall, bond prices rise. This is sometimes referred to as the bond see-saw, with yields at one end and prices at the other. The sensitivity of a bond's price to a change in yields is related to its maturity (term) and is measured by its 'duration' defined in years[4]. Think of it as how far out along the price side of the bond see-saw you are sitting. The further out (the longer the duration) the more you go up and down. A useful rule of thumb exists to approximate this relationship between yield and price: duration × rise (fall) in yield = capital loss (gain)

Below, one can see clearly that the longer the duration of a bond, or a portfolio of bonds, the greater the change in price for a given movement in yields. This is important to understand. Note that any capital fall will be reduced by the yield on the bond.

	Duration and price change					
Yield Rise	**1 Year**	**2 Years**	**3 Years**	**4 Years**	**5 Years**	**10 Years**
1%	-1%	-2%	-3%	-4%	-5%	-10%
2%	-2%	-4%	-6%	-8%	-10%	-20%
3%	-3%	-6%	-9%	-12%	-15%	-30%

Table 1: The longer the duration, the more volatile the price of a bond

Bonds come in all shapes and sizes. Picking the right type matters

Bonds vary widely, from very low risk to equity-like in their nature, and therefore cannot all be lumped into the category of 'safe'. There are two things that define how safe or risky bonds are: who you lend to, and how long you lend for.

Who you lend to matters

If you lend to a company that is less financially sound than another, you would be expect a higher rate of interest from the former. Conveniently, most bonds are assigned a credit rating by a rating agency, such as S&P, Moody's or Fitch, that provides an indication of how likely a bond issuer is to pay the regular coupons and to return capital to the investor at maturity. Bonds rated from AAA to BBB are known as 'investment grade' and below BBB as 'high yield' or 'sub-investment grade' (formerly described as 'junk' bonds). The lower the credit quality, the higher the risk that the issuer fails to meet its interest obligations and capital repayments, but the higher the yield in return. There is no free lunch here.

At times of equity market crisis, money tends to flow from risky assets to high quality assets, driving risky asset prices down (e.g. high yield, low quality bonds) and safer asset prices up (e.g. high quality AA bonds).

How long you lend for also matters

Intuitively, when placing a bank deposit (simply part of the fixed income spectrum), one would expect a higher rate of return, the longer the maturity (term) of the deposit. The same applies to bonds. The difference is that the longer the term, the more volatile bond prices become, as we explored above.

The credit risk taken and the duration of these bonds matters. Looking at the Credit Crisis period again, we can observe the impact of these two choices. Lower credit quality bonds have poorer defensive qualities and those with longer maturities magnify this unfavourable trait. Higher quality, shorter-dated bonds provide a sensible balance between yield and defensive qualities. They will never be exciting but will get the job done when equity markets are in turmoil.

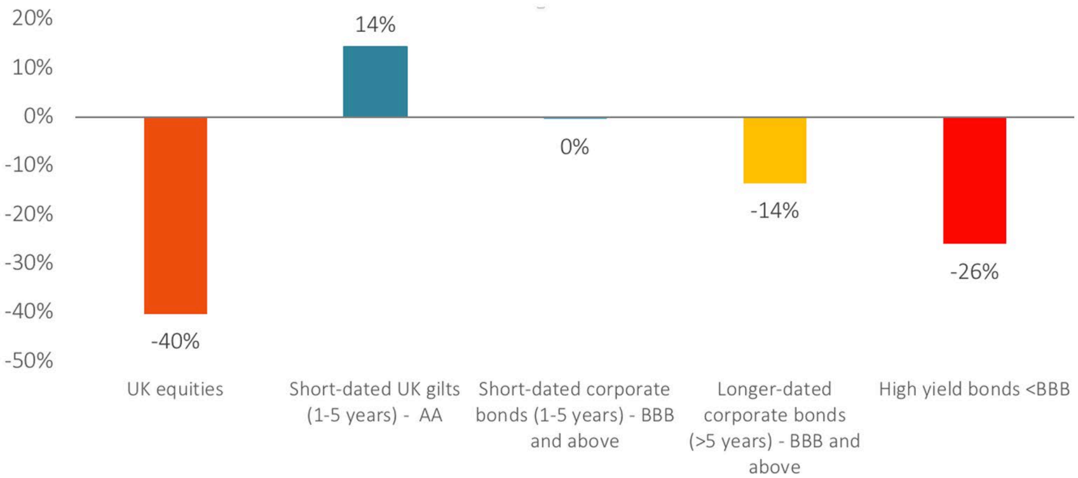

Figure 2: Bond performance during the Credit Crisis (Nov-2007 to Feb-2009)

Data: Nominal returns. MSCI United Kingdom NR GBP; BBgBarc UK Gilt 1-5 TR GBP; Markit iBoxx GBP Corp 1-5 TR; Markit iBoxx GBP Corp TR; BBgBarc Global High Yield TR Hdg GBP. Source: Morningstar Direct © Copyright. All rights reserved (see endnote).

We should be looking forward to yield rises

Today, bond yields sit at historically low levels. Logic, economics and history, however, suggest that investors should demand a return above inflation for lending their money to borrowers. At some point in the future, yields are likely to rise back to such levels. The problem is that no-one knows when, how quickly and with what magnitude it will happen.

Those with a cup-half-empty, short-term view on the world tend to be fearful of yield rises, due to the capital losses that bonds will temporarily suffer. 'Temporary' is the key word here, which we will explain shortly. Those with a cup-half-full attitude and a longer term view – remember that many investors have multiple decade investment horizons - should be looking forward to yield rises, because in the future their bonds will be delivering them with a higher yield, hopefully above the rate of inflation.

We used the term 'temporary' about the capital losses, because that is what they are. When rates rise, bonds now earn an investor more than they did before the rate rise and they reach a break-even point where the new higher yield has fully compensated them for the capital losses that occurred when yields rose. The time to break even is equivalent to the duration (that word again) of an investor's bond holdings. Short-dated bonds with a three year duration will break even after three years. Below is a hypothetical example. Follow it through.

Year end	Today	Year 1	Year 2	Year 3	Year 4	Year 5
Yield-to-maturity	1.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Immediate yield rise %	2.0%	-	-	-	-	-
Capital loss*		-6.0%	0.0%	0.0%	0.0%	0.0%
Yield during year		3.5%	3.5%	3.5%	3.5%	3.5%
Total return for the year		-2.5%	3.5%	3.5%	3.5%	3.5%
Cumulative total return		-2.5%	0.9%	4.4%	8.1%	11.9%
Annualised total return		-2.5%	0.5%	1.5%	2.0%	2.3%

Table 1 1: The impact of a 2% rise in yields on a 3 year duration bond portfolio

Note: * We have assumed that the capital loss is approximated by the rise in yields times the duration. In reality due to convexity – capital losses would not be quite so great.

Holding cash deposits is not the solution

Imagine that an investor felt that rate rises were likely to occur, with a detrimental, albeit temporary, impact on bond returns in the near future. They decide to place a deposit for three years, receiving interest of 1.5% p.a., comparable to the current yield on three-year bonds.

Let's assume that they are right and bond yields do rise shortly thereafter – as in the table above – and bonds suffer an initial fall in price. Although they may feel pleased at first, the reality is that in three years' time when their deposit matures, they end up with the same return as the bond portfolio. Yes, it's true, as you can see from the green-coloured cell in the table above.

Others may be tempted to place the funds in an easy access account and try to time when to get back into the market. Easy access accounts will pay lower rates than 3-year deposits. What happens if yields do not rise? The answer is that returns on cash will be lower than the return of 1.5% p.a. in the bond portfolio. Timing markets is not an easy game to play and should be avoided.

Long-term investors should be looking forward to rises in yields, as they will be better off in the coming years. Bonds make good sense and are an important part of most investors' portfolios.

You can't arbitrage your adviser's fees!

It is tempting to think that if there is little difference in return between bonds and cash in the event of a yield rise, then withdrawing the cash from the portfolio will avoid having to pay your adviser's fee on that part of the portfolio! Yet that is to completely miss the true value of the ongoing financial planning and broader advice that you receive from your adviser: from building and overseeing your financial plan and the life goals it contains, to handholding you through material events in your life journey and bad times in the markets. Taking a fee from the portfolio is simply a hassle-free means of paying for advice. Forensically looking at the overall advice fee against a specific part of the portfolio is to miss the wood for the trees.

In conclusion

Bonds are a very important part of most portfolios, providing lower absolute levels of volatility than equities and protecting portfolios from periods of severe equity market trauma that occur from time to time. As bond yields and prices are inversely related and prices move more when bonds have a higher duration, owning shorter dated bonds reduces the time to breakeven from a rise in yields. Placing a deposit to avoid yield rises does not help and is of little practical merit for long-term investors. Owning higher quality bonds over lower quality bonds makes sense too, as they provide a better likely outcome, just when you need them to. Be prepared for unexciting returns as yields - potentially - move back to a more normal level. No one knows when or how quickly this will happen, so don't try to second guess the guessers. Sit back and remember: 'You don't need bonds until you need them!'

End notes

1. Data: Cash = UK 1 month T-bill adjusted by UK RPI; bonds = Citi WGBI 1-5 Year Hedged GBP from 02/1988 To 02/2018 adjusted by UK RPI. Source: Dimensional Returns 3.0.
2. Usually this is described as a bond's yield-to-maturity, which takes into account both coupon and capital gains or losses, when the bond is held to maturity.
3. For example: imagine a bond is issued with a one year maturity at a price of 100 (its 'par' value) and a coupon of 4% p.a. If after issue the market demands a 6% yield, the bond's price must fall to 98 to allow the investor to achieve a yield of 6% over the life of the bond. This will be made up of the 4% cash coupon payments made and a 2% capital gain achieved when the bond matures at its par value of 100.
4. Duration is in effect the average time in which a bondholder is paid back, when all the cash flows of the bond have been discounted back to a present value.

Other notes and risk warnings

Use of Morningstar Direct data

Acuity is distributed for educational purposes and should not be considered investment advice or an offer of any security for sale. This volume contains the opinions of the author but not necessarily the Firm and does not represent a recommendation of any particular security, strategy or investment product. Information contained herein has been obtained from sources believed to be reliable, but is not guaranteed.

Past performance is not indicative of future results and no representation is made that the stated results will be replicated.

Errors and omissions excepted.

sensibleinvesting.tv is owned and operated by Barnett Ravenscroft Wealth Management, a trading name of Barnett Ravenscroft Financial Services Ltd, which is authorised and regulated in the United Kingdom by the Financial Conduct Authority FRN: 225634 and registered in England and Wales under Company No. 04013532.

The registered office address of the Firm is 13 Portland Road, Edgbaston, Birmingham, B16 9HN

Acuity

Sensible
investing.tv

www.sensibleinvesting.tv