

The Financial Times Guide to Investing for Income

Over the past decade the UK government has started issuing more and more index-linked gilts, especially as inflation rates have hit ever lower levels. But by far the most enthusiastic issuer of index-linked government bonds is the US Treasury. Between 1997 and 2004, the issuance of Treasury Inflation Protected Securities (TIPS) soared almost tenfold from \$25 billion to \$200 billion – in fact by the end of this decade, the US Treasury expects it will be issuing almost as much in TIPS as in conventional bonds.

HOW TO WORK OUT WHETHER AN INDEX-LINKED GILT IS A GOOD INVESTMENT

Index-linked gilts are a complex and relatively difficult to understand beast. These are all issued at a nominal par price of 100p and then pay a coupon that is determined in part by the RPI level three or eight months prior. Crucially they pay out a coupon which is taxable and is likely to vary with inflation, plus the redemption at maturity is also dependent on inflation levels, i.e. if the duration is many years, they're highly unlikely to pay out at par of 100p. The final redemption amount will vary based on inflation – this is calculated by looking at what's called an RPI index level.

To understand how this might all work let's take two simple examples – one index linker due to mature in 2017 and another due to mature far in the future, in 2055.

- 11/4% Index-linked Treasury Gilt 2017 is trading as of writing at 124.83p based on the dirty price. This dirty price is calculated as the product of the real clean price (no interest accumulated at all) and the relevant index ratio (more on that later), plus the accrued interest. Like all index-linked gilts this pays out twice yearly with the coupon subject to further income tax and any capital gains free of tax. Crucially the RPI index levels used for working out final values are based on a three-month lag.
- 11/4% Index-linked Treasury Gilt 2055 is trading at a dirty price including accumulated interest at 144.06p.

The next step is work out what these two linkers might be worth under different inflation scenarios. Luckily the government's debt office – the Debt Management Office – has an excellent website with a range of invaluable tools, all at www.dmo.gov. uk. To access most of the gilts-based tools find the tab titled Gilt Market and then search for the side link to Index-linked Gilts. This page contains a number of tools including one called 'calculating estimates of redemption payments' which allows you to input various inflation scenarios and then estimate the final payout amounts.

You may also encounter a peculiar form of government bond known as a **perpetuity**, i.e. a bond issued by the government many hundreds of years ago, that has never been redeemed and continues to pay out an interest rate into perpetuity. One of the most common perpetuity-based securities

the War Loan no longer has a maturity date

in the UK is called the 3.5% War Loan which is a gilt first issued by the government in 1917 when it sought to raise finance for World War 1. In its

early life the War Loan paid an income of 5% but this was reduced to 3.5% during the 1930s as a consequence of the economic depression. The War Loan was supposed to reach maturity in 1952 but as yields were above 3.5% at the time the government decided against redeeming the debt. The War Loan no longer has a maturity date.

As we move away from the world of government bonds we also encounter quasi governmental organisations which issue bonds. These bonds might be issued by a variety of 'arm's-length' agencies – on the continent some agencies fund local small businesses through bonds. Alternatively they might be issued by organisations that are not accountable to any one government, such as the European Investment Bank (EIB) or even the IMF. But all these organisations share one common feature – a government or a collection of governments has explicitly stated that they will back these debts, i.e. if all else fails, a government will honour the debt. That 'guarantee' means these are viewed as almost risk free by the market, which allows the issuers to borrow at rates close to gilts.

Last but by no means least investors may also encounter emerging market debt bonds issued by governments in places such as China, Russia and India. These are perceived as being riskier than the equivalent UK or US debt and thus more expensive in terms of the interest rate paid – see the following box.

ALTERNATIVE BOND IDEAS: PART 1 WEALTHY NATION EMERGING MARKET BONDS

Emerging market bonds have been growing in popularity over the past decade – many investors seem to have overcome their worries about third world countries defaulting on their debts and now view the emerging markets as potentially stronger. But that new-found confidence – and enthusiasm for the higher yield on offer - can't hide the fact that many emerging markets do still have weak national balance sheets in that the governments may not owe much but the corporate sector is heavily in debt.

One novel take on this challenge comes from a London-based hedge fund called Stratton Street which has set a Wealthy Nations Bond fund with private bank EFG. This new fund is trying to capitalise on a specific opportunity based on value considerations – it focuses its investment selection criteria solely on bonds from countries where overall levels of indebtedness are low and yields relatively high.

The scoring system that ranks nations is especially interesting and boasts a number of overlays – the fund's managers use a range of debt measures that produce a bias towards oil-rich states for instance. Oil-rich countries such as Qatar and the United Arab Emirates are clearly not going to have problems paying down their debt – their net foreign asset position is incredibly low. Russia is another example of this relative value-based overlay built on macro-economic analysis. Mention

Russian top-tier debt and most investors would reckon you were crazy, but according to Stratton Street, Russia has low overall total levels of debt and the government has explicitly said it will back the debt of its largest state-owned companies. That doesn't necessarily apply all the way down the pecking order to smaller entities but Stratton Street Capital reckon that elevated yields on offer more than compensate for the extra (low in their opinion) risk with investment grade debt.

Add this all up and you end up with an emerging markets debt fund that's paying close to 6% per annum or at least 200 basis points above most UK gilt stock, all achieved with very high credit quality, according to the managers. One of the nearest equivalent funds is an exchange traded fund from iShares which invests in a global index of emerging market government debt – this too has some big Russian debts within its portfolio but there's also plenty of stuff from much riskier (and very indebted) Turkey and Venezuela, and it's paying 200 basis points less in yield for extra risk. The Stratton Street fund managers reckon that this value-based anomaly based on what they regard as investment grade debt will be whittled away over the next few years, generating a handy 20–25% capital uplift.

Corporate bonds

These are issued by companies and corporations, large and small, from almost every sector in the global economy although some of the most popular have been issued by the large private sector banks. In many respects these bonds are almost identical in form and structure to gilts or bonds issued by governments – they feature the full range of structures, with all the same characteristics (coupons, maturities) but with one key difference, namely risk. Corporations and companies, banks and industrial companies – all can, and do, go bust from time to time (and especially during recessions), so that extra risk is reflected in the interest rate charged to the borrower.

The issuance of corporate bonds has expanded massively in the last decade as Figure 3.8 from Barclays Capital shows – that growth in the total stock of bonds isn't surprising given the obvious advantages of bonds.

Investors have flooded into funds comprised of corporate bonds for a wide range of reasons including:

- They're another form of bond with different risk characteristics compared to gilts, thus allowing the investor to build a diversified portfolio of bonds from different issuers.
- Most corporate bonds provide an income that is both steady and greater than that provided by government bonds.
- Corporate bonds are also increasingly easy to trade in and out of. In fact corporate bonds are often more liquid than other securities and stocks. In the USA, for example, corporate bond trading averaged about

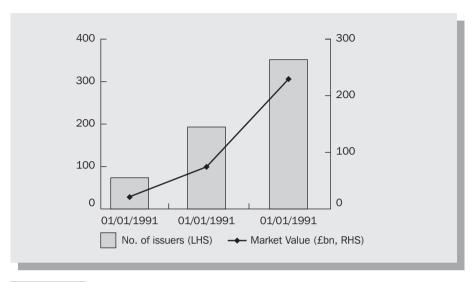


Figure 3.8 Sterling corporate bond market

Source: Barclays Capital

\$15 billion per day in 2006, according to the Securities Industry and Financial Markets Association, although it is worth noting that dealing spreads for these bonds are wider than those for gilts with spreads on lower quality bonds typically 0.2% to 0.3%, compared to 0.1% for gilts. Astonishingly the highest quality segment of the corporate market (investment grade – for a description of this market see below) now exceeds the gilt market in size.

Risk can be easily measured. In a later section we'll look at the credit scoring system used by the likes of S&P to assess the risk of investing in a particular bond. These measures are now widely used and understood, and investors can sensibly assess the basic risk of a corporate bond within just a few seconds. Other factors being equal, the better a bond's credit quality, the lower the credit spread. Broadly speaking, lower-rated corporate bonds (BBB rated) do, on average, trade on lower prices and higher yields compared to highly-rated, low-risk bonds with a rating of AAA.

Within this vast global universe of corporate bonds you'll encounter two basic distinctions – that between investment grade and speculative grade (also known as high-yield or 'junk') bonds. The first category of bonds (investment grade bonds) itself encompasses a vast range of 'risk levels' (see our discussion of credit ratings later in the chapter) whilst speculative bonds

or junk bonds are clearly regarded as riskier, and must pay a higher interest rate to compensate the investor for the possibility of future default.

In reality though the very term junk is itself misleading, implying that the issuers are close to rubbish and thus are likely to go bust. In fact the majority of these bonds will never default, and all interest coupons end up paid – investors might even make some money by buying them cheaply second hand on the market and then waiting around (collecting those regular coupons or interest rate payments) until they redeem at par, paying back the entire principal.

Many large fund management firms are already aggressive operators in the junk bond space. We've already mentioned PIMCO a number of times in this chapter – it's the largest bond fund manager in the world – and although this American firm is best known as an investor in high-grade government bonds, it's also a big fan of investing a small amount of your portfolio in relatively high yielding junk bonds.

The case for investing in junk bonds

The biggest attraction of junk bonds is the relatively chunky yield. According to PIMCO:

For much of the 1980s and 1990s, high yield bonds typically offered about 300 to 400 basis points of additional yield relative to Treasury securities of comparable maturity... according to [investment bank] Merrill Lynch, high yield bonds offered about 306 basis points of additional yield relative to Treasuries as of Sept. 30, 2005.

(http://canada.pimco.com)

But the attractions of junk bonds don't stop with the yield on offer – investors can also make some big capital gains as these bonds increase in price. This capital uplift can happen after the bonds are upgraded by ratings agencies or because an economic upturn boosts the confidence and underlying profitability of the companies that issue the bonds. According to PIMCO 'high yield bond prices are much more sensitive to the economic outlook and corporate earnings than to day-to-day fluctuations in interest rates. In a rising-rate environment, as would be expected in the recovery phase of the economic cycle, high yield bonds would be expected to outperform many other fixed income classes' (Ibid.). Last but no means least, junk bonds also offer some diversification benefits to investors – the high-yield sector generally has a low correlation to other sectors of the fixed income market.

The risks are also equally obvious. Clearly the chance of default by the issuer is greater compared to investment grade bonds, and very likely to grow as

credit rating agencies may downgrade the bonds an economy slips into recession. It's also important to realise that if a company's financial health deteriorates credit rating agencies may downgrade the bonds, which can knock prices. Perhaps most

importantly PIMCO itself notes that 'companies rated below investment-grade may be more negatively affected by economic downturns and adverse market conditions than those with higher credit ratings' (Ibid.).

A huge global market for all types of bonds vs equities

Add up all these different structures and issuers and the reader can begin to understand the vast scale of the aggregate bonds space - corporate and government. There are quite literally hundreds of governments and thousands of quasi-governmental organisations (including municipalities in the USA) and tens of thousands of corporations around the world that issue bonds of one form or another. Getting a handle on just how huge this potential market is really isn't actually that easy. For example hundreds of different towns and municipalities in the USA issue their own debts, and some of them are rarely if ever traded on any public exchange, while the European Investment Bank may have several hundred bond issues trading at any one time. One recent stab at putting a total figure on the bond markets was made in a report from Merrill Lynch called 'Size and Structure of the World Bond Market: 2004' which estimated that there was about \$45 trillion in global bonds outstanding at the end of 2003 – a year earlier a report by the International Monetary Authority in 2002 estimated the total amount of debt securities as around \$43 trillion.

More recently a study by the McKinsey Global Institute, '\$118 Trillion and Counting: Taking Stock of the World's Capital Markets', put the size of the global bond market at about \$51 trillion in 2003. By comparison the global equity markets – those that trade in stocks and shares – was estimated by this same study to be worth just \$32 trillion, around two-thirds the size of the global bond market. There's more detailed analysis available on who issues bonds in Figure 3.9 which is from UK investment bank Barclays Capital and shows the composition of one of their most widely followed bond indices (an index tracks the major issues of a stock or bond), namely the BarCap Global Aggregate Bond index.