

State of Play



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As 2022 begins our Investment Specialist, Simon Durling, explores how bonds work and why they remain so important to managing investment outcomes for investors. State of Play also shares Simon's thoughts on the investment outlook for fixed income assets at a pivotal moment when rising inflation and interest rates threaten medium-term investment returns.

So, what are bonds?

Bonds are very similar to I owe you's. The investor lends money typically to either a country or a company for a fixed period of time in return for interest. The money the investor lends is known as the principal, or face value and over the term of the bond they receive regular interest payments, called coupons. These coupons are fixed throughout the term of the loan, hence why these assets are known as 'fixed income' assets. Assuming the company or the institution doesn't go bust, at the end of the agreed period the investor is paid back the money they are owed. The debt itself may be bought when it is issued or more commonly in the secondary market, which enables investors to buy and sell existing debt, where the value of the principal will change based on a few important factors. In addition, if the bond is purchased, either at issue or after, it is not necessary for the investor to hold the bond until maturity as they can 'sell' the debt to another investor before the maturity date.

Why do companies raise money using bonds?

A sensible question that may be asked is 'Why doesn't a company just borrow the money from a bank?' Depending on economic conditions and the outlook, approaching commercial banks to borrow money may be the best solution for companies looking to borrow or 'raise' capital. Another solution is to 'sell' a portion of the company value by issuing shares for investors to buy. However, depending on the market conditions and the markets appetite for buying corporate debt, the same company may be able to issue a bond over the right timeframe and for a lower interest rate and debt repayments. Normally, the bond covenants or rules will ensure investors 'lending' the money via the bond issue will be 'first' in line for any assets in the event of a company going bust, importantly, before ordinary shareholders.

What could a typical bond look like?

2.5% Treasury stock 2030

What do the various parts mean?

- **2.5%** - This is the coupon rate which indicates how much you'll receive per year, generally paid in six monthly instalments.
- **Treasury stock** – This is who you'd be lending to, in this instance it is a UK Government bond (also known as gilt). For corporate bonds, you'll find the company's name here.
- **2030** – This is the maturity date, when you'll get the principal (your original investment) back.

What influences the interest charged on a bond?

Regardless of whether a country, a company, or an organisation are borrowing money when issuing a new bond, the amount of interest rate or coupon is typically decided by two key elements - the term of the bond and the risk of default. The 'credit worthiness' is normally built around a rating given by different 'rating agencies' like Standard and Poor's or Moody's. Like consumers, governments and companies are assigned a credit score based on their ability to meet their financial commitments. Interest payments are usually highest on bonds with the lowest credit ratings because they are perceived to be a greater risk for investors. When a bond has a high rating – anything from 'AAA' down to 'BBB' – they are deemed to be 'investment-grade', lower-risk bonds. On the corporate side, these ratings are usually given to financially robust institutions, such as utility companies and supermarkets. Anything below this rating is considered 'sub-investment grade', as the risk of default on the debt being issued is much higher. Over the

years the choice of bonds has expanded extensively including high yielding overseas bonds and emerging market bonds, often from large companies with excellent balance sheets which offer better coupons than traditional corporate debt.

What is the difference between interest rate and yield?

When a new bond is issued, the interest rate or coupon being paid is normally at a fixed rate. If the investor buys the bond at issue, then the yield and the interest rate being paid are the same assuming the bond is held all the way through to maturity. However, most bonds are bought and sold through a secondary market and the principal value based on a starting value of £100 will change depending on any changes to the interest rate environment and outlook, or the financial wellbeing of the issuer of the bond in question.

Bond prices will rise when interest rates fall because the rates of interest they pay are fixed and may beat the short-term rates available from banks. Therefore, you may buy a bond or UK Government bond for an amount above or below the nominal value, and this will have an impact on both how much interest you receive as an income and the amount of money you will receive when the bond matures.

Yield is a general term that relates to the return on the capital you invest in a bond. The yield of a bond reflects the price you paid for the principal in relation to the fixed income being paid to maturity. So, as a simple example, if the bond cost £110 and pays 4% through to maturity, whilst the 4% is fixed, the bond cost more than the original £100 issue price. The interest rate being paid of 4% divided by the purchase price of £110 means the yield is 3.63%, not the 4% fixed income. Conversely, if you bought the same bond for £90 the yield would be much higher at 4.44%. A bond's price and yield determine its value in the secondary market.

Bond terms

Bonds are often referred to as being short-, medium- or long-term. Generally, a bond that matures in one to three years is referred to as a short-term bond. Medium or intermediate-term bonds generally are those that mature in four to 10 years, and long-term bonds are those with maturities greater than 10 years.

Measuring bond risk

There is an inverse relationship between the price and the yield of a bond. Another important factor is knowing how much a bond's price will move when interest rates change. Putting aside a change in default risk, to estimate how sensitive a particular bond's price is to interest rate movements, the bond market uses a measure known as duration. In 1938, economist

Frederick Macaulay suggested duration as a way of determining the price volatility of bonds. 'Macaulay duration' is now the most common duration measure.

Duration can help predict the likely change in the price of a bond given a change in interest rates. As a general rule, for every 1% increase or decrease in interest rates, a bond's price will change approximately 1% in the opposite direction for every year of duration. For example, if a bond has a duration of 10 years, and interest rates increase by 1%, the bond's price will decline by approximately 10%. Conversely, if a bond has a duration of 10 years and interest rates fall by 1%, the bond's price will increase by approximately 10%. The longer a bond's maturity, the longer its duration, because it takes more time to receive full payment and vice versa for short duration. Duration, like the maturity of the bond, is expressed in years, but is typically less than the maturity.

Diversification

Learn more

You can learn more about Modern Portfolio Theory in [A brief history of asset allocation](#).

American economist Harry Markowitz first published his Modern Portfolio Theory (MPT) in 1952 for which he was later awarded the Nobel Prize. He theorised that investors could design a portfolio to maximise returns by accepting a quantifiable amount of risk. In other words, investors could reduce risk by diversifying their assets and asset allocation of their investments using a quantitative method. Markowitz argued that if most investments that offered a high return also came with high levels of risk and low return investments tend to have low levels of risk, by choosing an optimal mix of the two, investors could match a diversified portfolio aligned to their individual tolerance to risk. This approach broadly is still applied to this day with multi-asset solutions mixing asset classes to match an investor's attitude to investment risk.

Central to this approach is the relationship between different asset classes, especially shares and bonds. Portfolio managers are ideally looking for what is known as 'negative correlation'. The principle is that when share prices rise, bond values would fall and importantly, when shares fall in value, bond prices will rise. Clearly, this negative correlation is not absolute as there are long periods when both asset classes can rise at the same time and fall at the same time. However, bonds remain a crucial part of managing portfolio risk, helping to mitigate sharp falls in share prices at times of market volatility. Whilst the range of alternative investments has widened in the last few decades, bonds are still used as a foundation of investor portfolios, especially those who are either unwilling or unable to take greater investment risk.

Outlook for bonds

Since the early 1980's bond investors have seen yields fall gradually over time until the financial crisis in 2008 when central banks responded with ultra-low interest rates and a vast programme of quantitative easing, where new money was printed on an unprecedented scale. During this time bond investors have benefited from competitive levels of income and capital gains as yields fell. A reflection of this is shown in the lowest risk bond investment for UK investors, UK Government bonds, which have delivered a total return, coupons paid and capital growth, over the last 25 years just shy of 300%.¹ At the beginning of this period 10-year UK Government bond yields were 7.4% before falling to 0.1% at the start of July last year. In fact, since the beginning of the 'bond bull run' in early 1980 when yields were well above 12% yields have fallen consistently providing additional capital growth throughout this time.²

Why is this reference to historical yields and performance important? Clearly, any asset bought has a price tag or value, whether this be shares or bonds. With bonds the challenge for investors over the last 12 months has been and remains, that with the price of bonds so high (meaning yields being at record lows) what are the prospects for investment returns in the next few years. In previous State of Play editions, we have explored the threat of rising prices and inflation. This is critical to the bond outlook because as prices rise, well above the central banks targets, the response will be to raise interest rates. We have already seen last month the Bank of England increase the base rate from 0.1% to 0.25% as a reaction to the highest UK inflation rate for over 10 years of 5.1% registered in December. This represents the beginning of a probable return to normalised rates in the next couple of years. Before the financial crisis, base rates were 5-6%, whilst most experts are not expecting rates to rise to this level, ultra-low interest rates are likely to be confined to the history books.

Bond investors receiving very low interest coupled with potential falls in capital values face the prospect of a negative real return when compared to inflation for the foreseeable future. The impact of this will mean a tougher time for investment returns for most portfolios especially for those who are unwilling or unable to tolerate too much risk. Although it is too early to call the end of the global pandemic, the successful vaccination programme has at the very least offered light at the end of the tunnel. Whilst economies and stock markets around the world have made a remarkable recovery, uncertainty remains. In some respects, this uncertainty provides a healthy reminder of why bonds remain a staple ingredient of portfolios, even now.

All data as at 4 January 2022.

¹ FE fundinfo - 31/12/96-3/1/22

² Investing.com - United Kingdom 10-year Bond Yield Overview - 4/1/22

The principal reason is the potential diversification benefits when volatility rises, and markets take fright and fall significantly. At the start of the pandemic when share prices tumbled, bonds increased in value cushioning this fall. It is why, despite the current high prices, and the challenging outlook, bonds act as a crucial ingredient for portfolio managers looking to match investment risk and return for different investment objectives over various long-term time horizons.

Find out more!

Listen [here](#) to our latest Market Views from Stefano Amato, Head of Multi-Asset Solutions UK, as he shares his thoughts on the main themes dominating markets.

Note: Data as at 4 January 2022.



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