



Betashares guide to fixed income

betashares.com.au



Introduction

Fixed income has long been acknowledged as a core building block of a balanced portfolio, providing defensive characteristics and diversification benefits to investors.

However, research indicates that many Australian investors are underweight fixed income, particularly in superannuation. As an example, the average Australian superannuation fund's allocation to fixed income at the end of 2021 was just 28% of the OECD average (13.7% vs. 48.1%).¹

We believe the role of fixed income in an investment portfolio is significantly under-appreciated.

In times of uncertainty, such as when the outlook for economic growth deteriorates and investors lack confidence in the performance of equity markets, an exposure to fixed income becomes more important than ever. Investment grade corporate and government bond returns tend to have a low correlation with shares while yielding more than cash, and as a result, may help smooth out portfolio volatility, mitigate the effects of sharemarket drawdowns and reduce the risk of failing to meet investment objectives.

In this guide, we explain what fixed income is, and what drives its returns. We look at how you can invest in fixed income, and consider the benefits of including fixed income in your investment portfolio.

What is fixed income?

Before taking a closer look at why it is important to have exposure to fixed income, it's necessary to understand how fixed income investments work, and what drives their returns.

Fixed income covers several types of investment, the most well-known being bonds.

When you invest in a bond, essentially you are lending money to the bond issuer, which may be a company, government or other entity. Bonds pay a regular income stream to investors, called 'coupons' - some pay a fixed rate of interest, others pay a floating rate.

Fixed income covers several types of investment, the most well-known being bonds.



Fixed vs. floating (part 1)

Fixed rate bond

A **fixed rate bond** pays a set rate of interest for the term of the bond. You know at the time you make the investment how much interest you will receive on each payment date.

Floating rate bond

A **floating rate bond** pays a rate of interest that varies in line with a benchmark interest rate. As the benchmark interest rate changes, the interest you receive also changes.

As well as regular income payments, capital returns (gains or losses) are also possible from fixed income investments, as the market price of a bond is not fixed.

Depending on how interest rates move, the capital returns from a fixed income investment can be significant, and may exceed the returns from interest payments.

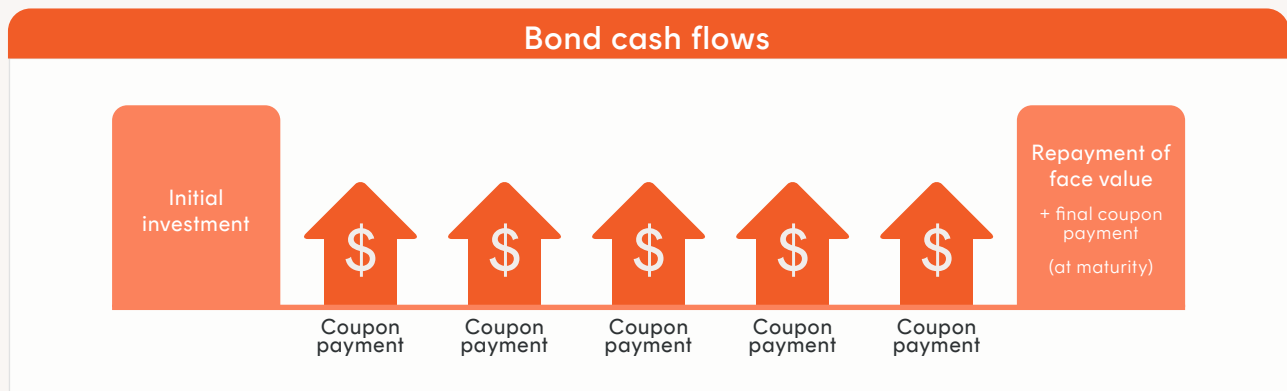
Investments that pay fixed interest tend to fluctuate more in price than those that pay a floating rate.

¹ Source: OECD, Pension Markets in Focus Preliminary 2021.

What determines a bond's value?

A bond can be thought of as a series of cashflows, comprising:

- regular interest payments (coupons), and
- repayment of the bond's face value at maturity.

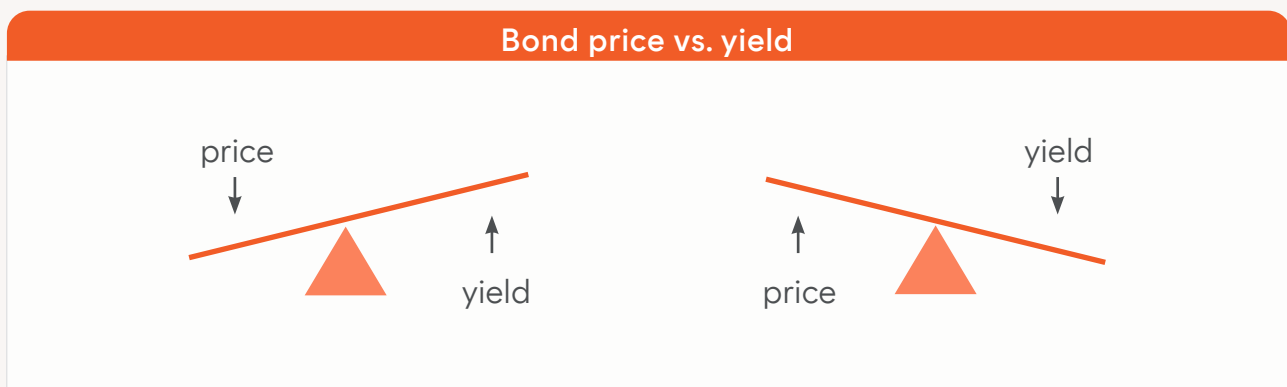


A bond's value comes down to what those future cashflows are worth in today's dollars. In investing terminology, the process of valuing future cash flows in today's dollars (the 'present value') is known as 'discounting'. This technique is applied in valuation across all asset classes.

The present value of a future cashflow will therefore depend on the discount rate that is used. Discount rates can vary for the various cashflows that a bond pays (the coupon payments and the return of principal at maturity), as longer-term discount rates are often higher than short-term discount rates. When all those discount rates are averaged out, we arrive at a bond's 'yield to maturity' – its expected annualised return over the bond's life.

The lower a bond's yield, the higher the value attributed to future cashflows, and so the more an investor will be prepared to pay for them today. The higher a bond's yield, the more those cashflows will be discounted, and the less someone will pay for them today.

So there is an inverse relationship between the price of a bond and its yield – as a bond's yield falls, its price rises (and vice versa). The longer the maturity of the bond, all else equal, the more sensitive its price is to yield movements.



Where an investment pays floating rate interest, its value will not fluctuate nearly as much with changes in interest rates. In contrast with fixed rate bonds, the income you receive from a floating rate investment varies in line with movements in a benchmark short-term interest rate such as the 3-month bank bill swap rate (BBSW).

Measures of return

- **Running yield**

The bond's annual coupon divided by the bond's current market price. Because it does not take into account the capital gain/loss made when the bond matures, running yield is not as complete a measure of returns as YTM, and should only be used as an indication of income expected over the next 12 months.

- **Yield to maturity (YTM)**

The expected annualised return over the bond's life. YTM factors in both regular coupon payments and the capital gain/loss that will be made if the bond is held until maturity (i.e. the difference between the bond's current price and its face value). YTM assumes that coupons are reinvested. Other related measures of return include Yield to Call (YTC) (calculated based on a bond's first or earliest call date, rather than its date of maturity) and Yield to Worst (YTW) (being the lower of YTM or YTC).

Each of these measures can be applied not just to a single bond, but also to a portfolio of bonds, or bond ETF (e.g. on a weighted basis).

What drives the return from a fixed income investment?

The yield on fixed income exposures reflects the following risks:

- **interest rate risk, and**
- **credit risk.**

Interest rate risk/duration

Part of a fixed income investment's return is linked to the current 'risk-free' interest rate i.e. what can be earned on a high-grade government bond with a similar maturity. Government bond yields in turn are affected by:

- **short term (cash) rates**
- **expected future cash rates, and**
- **expectations around economic growth and inflation over the term of the bond.**

As the risk-free rate changes, the price of a bond (or bond portfolio) changes. As interest rates increase, the price of a bond will fall. As interest rates fall, the price of the bond will rise.

It is important to understand that changes in expectations can have just as much of an impact on bond yields as changes in actual cash rates.

A 10-year 'risk-free' bond yield should capture not only the current overnight rate but also all the future expected overnight rates over the next 10 years. Shorter-term government bond yields primarily reflect short-term policy rate expectations, while longer-term government bond yields reflect a combination of medium-term policy rate expectations and longer-term growth and inflation expectations.

How much a bond's price changes in response to changes in interest rates depends on its duration – the expected timeframe over which an investor will recoup the price paid for the bond from the cashflows they receive.

Duration is a measure of sensitivity to movements in interest rates. The longer the duration of a bond, or bond portfolio, the more sensitive its price will be to changes in interest rates.

Credit risk

Credit risk refers to the additional risk of a fixed income investment over and above a 'risk-free' (government) bond.

An investment in corporate bonds, for example, involves liquidity risk. This is the risk that the corporate bond might be harder to liquidate or involve higher transaction costs than a government bond of the same maturity.

An investment in corporate bonds also involves the risk that the issuer of the bond will default on its obligations.

Credit risk will be reflected in the 'credit spread' – the spread above the risk-free yield to compensate for taking on credit risk. A bond of lower credit quality must offer a greater return to investors than a higher quality bond of the same maturity, because of the increased risk it involves. In addition, the credit spread at a given credit quality typically increases with maturity. Like duration, the impact of credit spread changes on a bond's price increases with maturity ('credit spread duration').

Within the credit market, there are, broadly speaking, two categories of bonds:

- **Investment Grade**

Bonds that are deemed to be largely free of default risk by the major ratings agencies, with S&P assigning investment grade to bonds rated from AAA to BBB-.

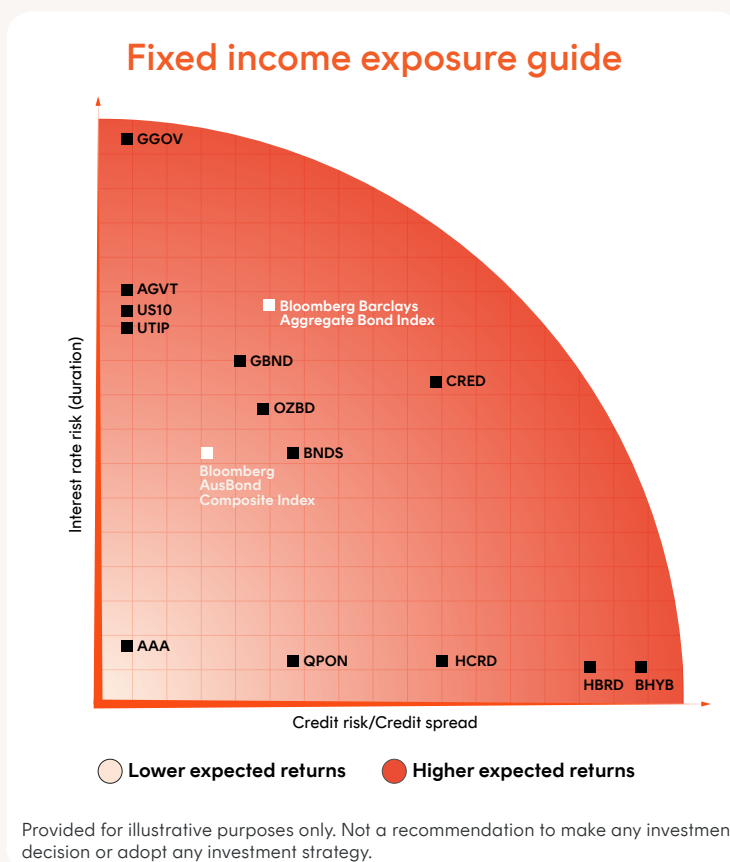
- **High Yield**

Also known as 'sub investment grade' or 'junk', includes bonds that are either unrated or assigned a credit rating of BB+ or below.

The higher the credit risk of a fixed income investment, the more 'equity-like' the exposure will be. It is important to bear this in mind when evaluating the diversification benefits a fixed income investment offers – the greater the credit risk a fixed income investment entails, the less the diversification it offers from your share investments. As a result, high-yield or sub-investment grade bonds historically have tended to suffer from negative returns at the same time as equities during periods of market stress (the very times you most want the benefits of diversification!).

Variables that affect credit risk include broad expectations of economic growth and corporate profitability, and company-specific factors like balance sheet health. You can substantially reduce the impact of company-specific factors by investing in a bond fund rather than individual securities – the more diversified exposure of a fund means you are much less exposed to the risk of any one issuer.

The chart on the right shows, in general terms, the exposure to the two sources of return premia of the funds in the Betashares fixed income, cash and hybrids suite, and how expected returns vary with credit risk and/or time to maturity (duration). The funds themselves are outlined later in this guide.



Why invest in fixed income?

There are several reasons we believe it's important to include an exposure to fixed income in your investment portfolio, including:



**Diversification
benefits**



**Volatility
reduction**



**Regular
income**

Diversification benefits and volatility reduction

For growth-oriented investors, it's generally accepted that equities are the primary engine for generating returns over time. Although all-equity portfolios are generally expected to deliver higher absolute returns than balanced portfolios over long time horizons, an all-growth portfolio brings with it significant day-to-day and month-to-month volatility. While adding defensive assets may sacrifice some returns, it can help to reduce overall portfolio volatility. This can be particularly beneficial for investors with shorter investment horizons, greater liquidity needs, or lower risk tolerances.

The idea behind diversifying your portfolio is that your fixed income allocation can act as a defence when equities are not performing well. Historically, in times of uncertainty when sharemarkets were experiencing stress, a 'flight to quality' often resulted in an increase in demand for the relative safety of bonds.

For this to work, your fixed income investments must show a low or negative correlation to equities.

During benign inflation environments (since the early 90s), the daily return correlation between bonds and equities has largely been negative, meaning bonds have tended to gain in value when shares have lost value and vice versa. However, during more inflationary periods, correlations between equities and high-quality bonds have tended to rise as it is bonds themselves, stemming from the central bank response to inflationary pressures, that can cause a negative valuation adjustment across all asset classes.

Despite these fluctuating correlations, it's worth remembering that diversification benefits still exist, since the bond/equities correlation is not a perfectly positive one. In addition, the largest equity drawdowns in history have tended to coincide with deep economic recessions. At these times, corporate earnings fall, typically driving expectations of future policy rate cuts and lower government bond yields – and therefore increasing bond values.

Analysis of US large cap stock drawdowns during historical recessions

Recession	Recession Start	Recession End	Date of max drawdown	Max stock drawdown during recession (from recession start date)	Return on long-term US Treasuries during stock drawdown phase (during recession)
Great Depression	Aug-1929	Mar-1933	Jun-1932	-83%	14.31%
Recession of 1937–1938	May-1937	Jun-1938	Mar-1938	-45%	3.57%
Recession of 1945	Feb-1945	Oct-1945	Mar-1945	-4%	0.21%
Recession of 1949	Nov-1948	Oct-1949	May-1949	0%	2.96%
Recession of 1953	Jul-1953	May-1954	Aug-1953	-5%	-0.08%
Recession of 1958	Aug-1957	Apr-1958	Dec-1957	-10%	8.83%
Recession of 1960–1961	Apr-1960	Feb-1961	Oct-1960	0%	6.84%
Recession of 1969–1970	Dec-1969	Nov-1970	Jun-1970	-20%	0.54%
Recession of 1973–1975	Nov-1973	Mar-1975	Sep-1974	-31%	-5.78%
Recession of 1980	Jan-1980	Jul-1980	Mar-1980	-10%	-7.67%
Recession of 1981–1982	Jul-1981	Nov-1982	Jul-1982	-13%	21.59%
Early 1990s recession	Jul-1990	Mar-1991	Oct-1990	-14%	-0.98%
Early 2000s recession	Mar-2001	Nov-2001	Sep-2001	-10%	4.67%
Great Recession	Dec-2007	Jun-2009	Feb-2009	-48%	11.09%
COVID-19 recession	Feb-2020	Apr-2020	Mar-2020	-12%	6.25%

Source: Morningstar. Long-term (i.e. 20-year) US Treasuries are represented by the Ibbotson Associates (IA) Stocks, Bonds, Bills, and Inflation® (SBBi®) series, "IA SBBi® US LT Govt TR USD". US large cap stocks are represented by the Ibbotson Associates (IA) Stocks, Bonds, Bills, and Inflation® (SBBi®) series "IA SBBi® US Large Stock TR USD Ext" (which is essentially the S&P 500 Index). Past performance is not indicative of future performance.

It's important to remember that fixed income investments are not all the same, and range from 'risk-free' government bonds to sub-investment grade corporate debt. The correlations of these individual investments to shares vary widely.

As explained in the previous section on the sources of bond returns, the more credit risk a fixed income investment has, the greater the correlation it has to equities, and therefore the lower the diversification benefits. For example, high-yield debt, involving significant exposure to credit risk, behaves in a more 'equity-like' way than government bonds, which generally involve no (or very low) credit risk.

Fixed income investments that tend to provide the greatest diversification benefits from equity exposures are government bonds and high-quality corporate bonds.

The diversification benefits that fixed interest investments offer are the main reason we believe it is not enough just to add cash holdings to a share portfolio. Cash, while providing capital stability, does not provide the same level of portfolio 'insurance' or diversification as certain types of bond exposures in periods when equity markets perform poorly. In addition, the value of cash can be eroded by inflation.

Regular income

Bond coupons are paid on a regular and pre-determined schedule. An ETF that holds a portfolio of bonds can therefore provide a regular and relatively reliable income stream, often at lower levels of risk than other assets such as shares or property. Fixed income investments also typically pay higher rates of interest than cash or term deposits.

How can you invest in fixed income?

It's generally impractical for individual investors to invest directly in bonds. Minimum investment size is usually much larger than for share investments, and investors may not necessarily have the time and skills required to properly research and analyse individual bonds. In addition, most bonds trade over-the-counter (OTC) in a dealer-based market, making it hard for most individual investors to assess if they are getting a fair price.

In contrast, ETFs provide a simple-to-access and convenient way to gain exposure to a portfolio of bonds.

The benefits of investing via a fixed income ETF instead of directly in individual bonds include:



Diversified exposure

Because a fixed income ETF will include bonds issued by a range of issuers, you are not exposed to the credit risk of just one issuer.



Consistent risk profile

With an individual bond, the passage of time decays the remaining time to maturity and the duration, eventually reaching zero at maturity. If reinvested in a new bond, the duration and hence interest rate risk can increase significantly to reflect the new bond's maturity, creating a very lumpy risk profile over the investment horizon. A bond fund, in contrast, will hold bonds with a range of maturities, and so will maintain a much smoother duration and therefore, a more consistent risk profile, which can better assist with portfolio construction and asset allocation.



Cashflow management

Coupon and principal payments typically need to be reinvested, which incurs transaction costs. Bond funds reinvest such payments in new bonds as a matter of course and generally incur significantly lower trading costs than what an individual investor would face.



Simpler investment process

There is no need to analyse and select individual bonds, rebalance into newly-issued bonds or manage maturing securities, as this is undertaken by the issuer or manager of the ETF.



Liquidity

Liquidity refers to how easily bond holdings can be converted to cash at fair prices. Individual bonds have variable liquidity, with many bonds thinly traded. In contrast, bond funds have relatively consistent liquidity due to the pooling of liquidity risk across a range of securities and issuers. Bond ETFs benefit from the presence of dedicated market makers and being traded on a securities exchange like the ASX.



Ability to benefit from roll return

Fixed income ETFs reinvest coupon and principal payments into new bonds – usually bonds with longer maturities. Because yields on longer-maturity bonds typically are higher than those on shorter maturity bonds, this enables the bond ETF to benefit from 'curve rolldown', capturing capital gains that naturally accrue as shorter-dated bonds are rebalanced into longer-dated bonds. In a rising rate environment, the reinvested proceeds earn a higher yield than the starting yield of the portfolio, mitigating some of the downside risks from valuation changes.



Ability to fine-tune your defensive allocation in one trade

Fixed income ETFs function as asset allocation building blocks, making it easy to adjust your portfolio based on your specific needs for diversification and income, and your tolerance for interest rate and credit risk.



Fixed vs. floating (part 2)

While an ETF may invest in fixed rate bonds, this does not mean that the income paid by the ETF is fixed. As bonds in the portfolio mature or are sold, new bonds are purchased, which are likely to pay a different coupon rate to the bonds they are replacing. The income paid by the fund will change to reflect the composition of the portfolio at any point. However, this is generally a gradual process, as bond maturities/sales are typically spread out over time.

In contrast, the income profile of a fund that holds floating rate bonds will be more responsive to changes in the interest rate environment, as the interest paid by the bonds in the portfolio will move in line with interest rate changes. As interest rates increase, the income paid on the bonds in the portfolio – and therefore the income paid by the ETF – will increase (and vice versa).

Betashares fixed income and hybrid solutions

The Betashares fixed income and hybrids product range has been created to provide solutions for a broad range of investors. Our funds provide a simple-to-access and cost-effective way to construct this important part of your investment portfolio.

All our ETFs are transparent, so you know exactly how the fixed income portion of your portfolio is invested.

The features of Betashares fixed income ETFs include:

- Traded on the ASX, so can be bought and sold just like shares.
- No minimum investment size (aside from any required by your broker).
- Proceeds from selling an ETF generally available T+2.
- Income paid on a regular basis (usually monthly or quarterly).
- Cost-effective, with management fees significantly lower than traditional unlisted actively managed funds.



Whether index-tracking or actively-managed, all our fixed income solutions offer the transparency of an ETF – portfolio holdings, the value of the Fund's assets, yield information and net asset value per unit are available on our website (www.betashares.com.au).

Traditional fixed rate bonds

ASX: AGVT

Betashares Australian Government Bond ETF

- holds a portfolio of high-quality bonds issued by Australian federal and state governments, supranationals and sovereign agencies
- offers regular attractive income, defensive benefits and the potential for strong returns in a falling interest rate environment

ASX: CRED

Betashares Australian Investment Grade Corporate Bond ETF

- holds a portfolio of investment grade Australian corporate bonds
- offers regular, attractive income, and potential defensive benefits when equity markets decline

ASX: BNDS

Betashares Western Asset Australian Bond Fund (managed fund)

- holds an actively managed, diversified portfolio of Australian government, semi-government, corporate bonds and other eligible fixed income securities
- offers regular attractive income, and the potential for added value through professional, active management

ASX: GBND

Betashares Sustainability Leaders Diversified Bond ETF – Currency Hedged

- holds a diversified portfolio of high-quality bonds meeting strict responsible investment standards
- enables investors to invest in fixed income in a way that is consistent with their ethical standards

ASX: US10

Betashares U.S. Treasury Bond 7-10 Year Currency Hedged ETF

- holds a portfolio of US Treasuries with maturities between 7 and 10 years
- offers access to high credit-quality bonds issued by the US Government, and potential diversification and defensive benefits during US recessions and periods of global economic weakness

ASX: GGOV

Betashares U.S. Treasury Bond 20+ Year ETF – Currency Hedged

- holds a portfolio of long-dated bonds issued by the US Government
- offers access to high credit-quality bonds, and potential diversification and defensive benefits during US recessions and periods of global economic weakness

ASX: OZBD

Betashares Australian Composite Bond ETF

- holds a portfolio of Australian corporate and government bonds intelligently selected on the basis of their risk-adjusted income potential
- offers the potential to deliver superior returns to both active and simple market cap-weighted passive approaches.

Cash and money markets

ASX: AAA

Betashares Australian High Interest Cash ETF

- invests in bank deposit accounts with selected banks in Australia
- offers regular income, and high levels of security associated with bank deposit accounts at banks regulated by APRA

Inflation-linked bonds

ASX: UTIP

Betashares Inflation-Protected U.S. Treasury Bond Currency Hedged ETF

- holds a portfolio of inflation-protected US Treasuries
- offers exposure to a portfolio of US Treasuries that provide protection from higher inflation by indexing both principal and coupon payments to the US CPI

Credit income

ASX: BHYB

Betashares Australian Major Bank Hybrids Index ETF

- holds a portfolio of listed hybrid securities issued by Australia's 'Big 4' banks
- offers attractive, tax-efficient monthly income, and potential defensive benefits when equity markets decline

ASX: QPON

Betashares Australian Senior Bank Floating Rate Bond ETF

- holds a portfolio of senior floating rate bonds issued by major Australian banks
- offers regular, attractive income that is expected to increase if interest rates rise, as well as the potential for a high level of capital stability

ASX: HBRD

Betashares Active Australian Hybrids Fund (managed fund)

- holds a portfolio of hybrid securities, bonds and cash
- offers attractive, tax-efficient income from a portfolio of hybrid securities that is actively managed with the aim of reducing volatility and risk

ASX: HCRD

Betashares Interest Rate Hedged Australian Investment Grade Corporate Bond ETF

- holds a portfolio of investment grade Australian corporate bonds
- offers attractive monthly income, and employs a hedging strategy to substantially reduce interest rate risk

More information

For more information about Betashares fixed income and hybrid funds, visit www.betashares.com.au or speak to your adviser.

There are risks associated with investments in the Betashares fixed income funds, including interest rate, credit and market risk, as well as hybrid complexity risk and sector concentration risk in relation to HBRD and BHYB. For more information on the risks and other features of each fund, please read the relevant Product Disclosure Statement, available at www.betashares.com.au. The Target Market Determination for each fund is also available at www.betashares.com.au/target-market-determinations.




Contact us today

T: 1300 487 577 (within Australia)

T: +61 2 9290 6888 (outside Australia)

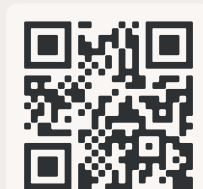
E: info@betashares.com.au

W: betashares.com.au

   @Betashares

  /Betashares

To learn more about Fixed income,
scan the QR code below



Important information

Betashares Capital Limited (ABN 78 139 566 868, AFSL 341181) is the responsible entity and issuer of the Betashares Funds. This information is general only, is not personal financial advice, and is not an offer or recommendation to make any investment or adopt any investment strategy. It does not take into account any person's financial objectives, situation or needs. Before making an investment decision investors should obtain and read a copy of the relevant Product Disclosure Statement available from www.betashares.com.au or by calling 1300 487 577, and obtain financial advice in light of their individual circumstances. You may also wish to consider the relevant Target Market Determination, which sets out the class of consumers that comprise the target market for each Betashares Fund and is available at www.betashares.com.au/target-market-determinations. Investments in Betashares Funds are subject to investment risk and the value of units may go down as well as up. Past performance is not an indication of future performance. The performance of Betashares Funds is not guaranteed by Betashares or any other person. To the extent permitted by law Betashares accepts no liability for any errors or omissions in, or loss from reliance on, the information herein.