

# Module 6: Fixed income ETFs

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## Contents

Topic 1: I want exposure to bonds.....	3
What are bonds? .....	3
The bond market is diverse .....	3
Bond prices .....	4
What makes a bond's price change? .....	4
More information .....	5
Topic 2: How fixed income ETFs work .....	6
Bond indices.....	6
How does an ETF track a bond index? .....	6
Which bond indices can fixed income ETFs track? .....	7
Income and capital gain/loss .....	7
Topic 3: Returns from a fixed income ETF .....	8
'Fixed income' does not mean 'fixed distributions' .....	8
Why do the distributions paid by a fixed income ETF vary? .....	8
Finding information about the bond portfolio's return .....	8
Measures of return .....	9
Warning! .....	10
Topic 4: Risks.....	11
Like all investments, ETFs involves risk. ....	11
Interest rate risk .....	11
Topic 5: Case study .....	12
Benchmark index .....	12
Portfolio composition .....	12
Income and costs .....	12
Measures of return .....	13
Summary.....	14



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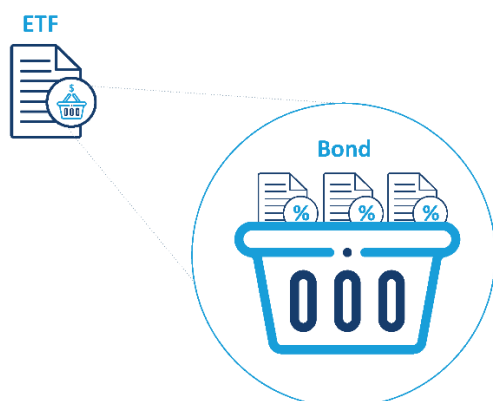
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## Topic 1: I want exposure to bonds

Fixed income ETFs give you exposure to bonds.

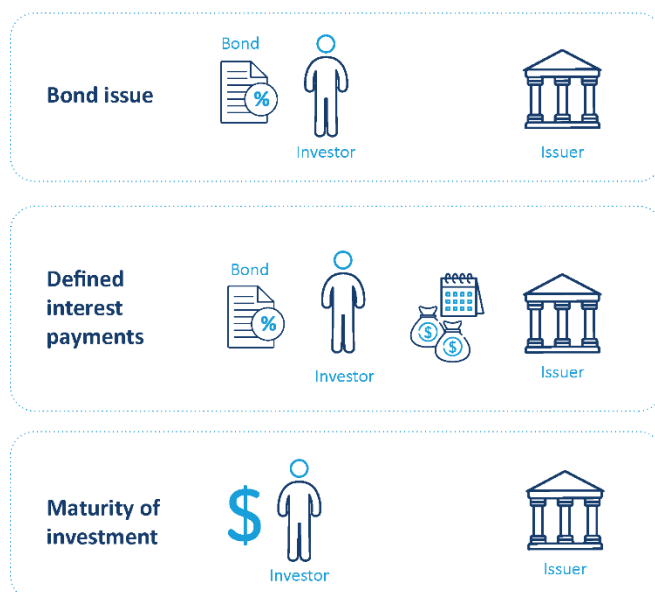
Bonds can provide capital stability, and regular, predictable income. They enable you to diversify your exposure, as the investment performance of bonds generally is not correlated with the performance of the sharemarket.

While they are typically viewed as less risky than shares, bonds are not risk-free.



### What are bonds?

Before we look at how fixed income ETFs work, it is important to understand what a bond is.



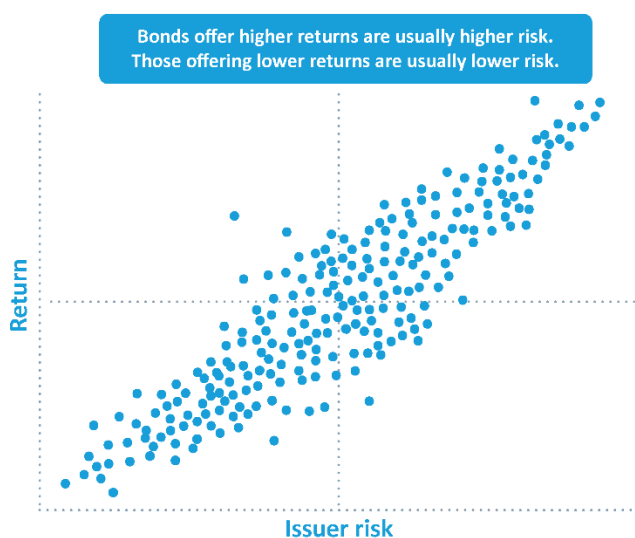
A bond pays a regular defined income, expressed as a percentage of the bond's face value. Income is generally paid either quarterly or semi-annually.

At maturity, the bond issuer pays the holder the bond's face value.

Bond prices are typically more stable than share prices.

### The bond market is diverse

Each bond is unique. Features that vary include the bond's rate of return and term to maturity, and the creditworthiness of the issuer.

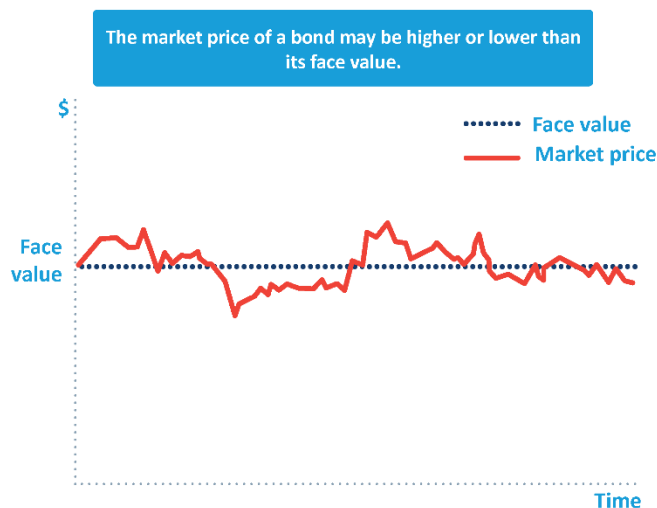


A bond's risk and its potential return depend largely on who the issuer is. The riskier that investors think the issuer is, the higher the return they will demand.

Bond issuers in Australia include federal and state governments, semi-government authorities and large companies.

### Bond prices

Many investors focus on the income paid by a bond.



It is important also to understand that the price of a bond fluctuates, and that it is therefore possible to make a capital gain or loss from a bond.

The total return from an investment in a bond includes both income and any capital gain/loss the holder makes.

### What makes a bond's price change?

A bond's price change will change as a result of changing market views on:

- the future direction of interest rates, and
- the issuer's credit risk.

Interest rate view	Credit risk view	Bond price
↑	↑	↓
↓	↓	↑

### **Interest rates**

There is an inverse relationship:

- If investors expect interest rates to rise, bond prices are likely to fall.
- If investors expect interest rates to fall, bond prices are likely to rise.

### **Credit risk**

If investors believe the risk of the bond issuer defaulting on its obligations to pay interest and to repay face value at maturity has increased, the price of the bond is likely to fall.

### **More information**

If you are new to bond investing, we recommend that you review the [investment tools and resources](#) available on the ASX website.

You can learn how bonds work - their features, benefits and risks.

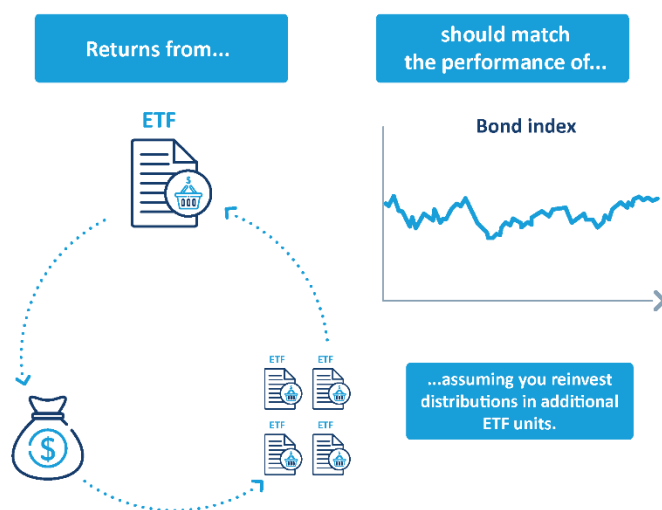
## Topic 2: How fixed income ETFs work

### Bond indices

A fixed income ETF gives you exposure to a portfolio of bonds in one transaction.

The ETF tracks a specified index that measures the performance of a portfolio of bonds. The ETF's objective is to provide the same performance (before costs and tax) as if you held those bonds directly, assuming you reinvest all distributions in additional ETF units.

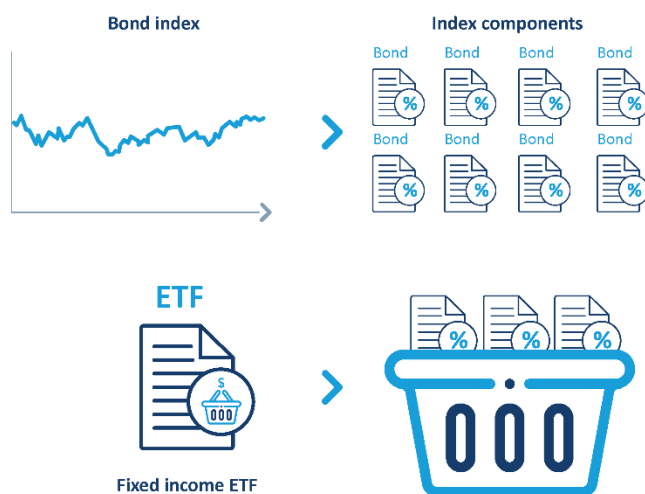
The issuer's website will tell you the composition of the index.



### How does an ETF track a bond index?

The ETF invests in the bonds that make up the index. It may invest in all the bonds in the index, or in a representative sample.

Unlike the individual bonds within the portfolio, a fixed income ETF does not have a maturity date, nor does it have a face value.



As bonds within the portfolio mature, they are typically replaced by other bonds with similar features.

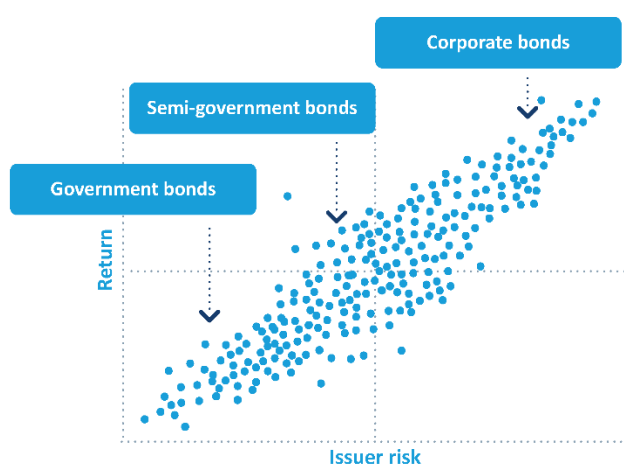
The ETF issuer may also use bond index futures contracts to achieve the same exposure as holding the underlying securities. This component is generally a small percentage of a fund's strategy.

### Which bond indices can fixed income ETFs track?

Fixed income ETFs quoted on ASX track a range of indices.

- Australian Government bonds
- semi-government bonds, or
- corporate bonds.

Or the index may be a composite index that includes several types of bonds.



Just as the risk and potential return of a bond depends largely on who the issuer is, so the risk and return of a fixed income ETF depends primarily on the type of bond the ETF holds, and the issuers of the bonds in the portfolio.

Bonds issued by federal and state governments generally have lower credit risk, and therefore offer lower returns, than corporate bonds.

### Income and capital gain/loss

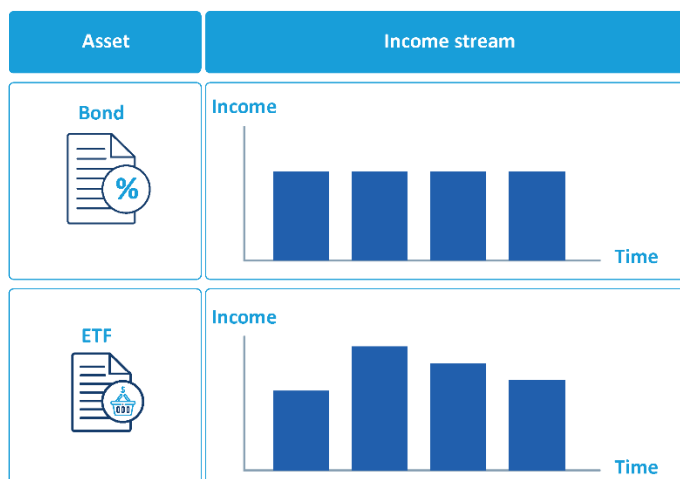
A fixed income ETF pays regular distributions, typically quarterly.

You may also make a capital gain or loss on the ETF, as the price of the ETF changes in response to changes in the value of the bond portfolio.



### Topic 3: Returns from a fixed income ETF

#### 'Fixed income' does not mean 'fixed distributions'



It is important to understand what the 'fixed income' in 'fixed income ETF' refers to.

It means that the assets the ETF gives you exposure to - bonds - individually pay a set amount.

The distributions you receive from an ETF, however, vary over time.

#### Why do the distributions paid by a fixed income ETF vary?

The composition of the bond portfolio underlying the ETF changes over time, as individual bonds in the portfolio mature or are sold. These bonds will be replaced by new bonds that may pay higher or lower income.

Coupon paid by maturing bond	Coupon paid by replacement bond	Income from ETF likely to...
5%	6%	Increase
5%	4%	Decrease

This is an important point and a different mindset to investing in a term deposits where the rate of interest is fixed over time. As bonds with different rates cycle through the portfolio, income from fixed interest ETFs will change over time.

Distributions paid by the ETF may also include gains made as bonds are sold or mature, leading to variations in the income paid to ETF holders.

#### Finding information about the bond portfolio's return

It is impossible to predict exactly what income an ETF will pay, or how the ETF's price will change.

However the ETF issuer's website (hyperlink to product list on ASX website) will provide two particularly important measures of return:

- the income the bond portfolio is currently paying (the 'running yield'), and
- the likely return including both income and capital gain/loss on the bonds in the portfolio (the 'yield to maturity').



It is important to understand what these two measures mean, and why there is sometimes a significant difference between the two figures.

## Measures of return

### Running yield

The running yield gives you an indication of the income you will receive each quarter.

ETF bond portfolio	Face value	Coupon payments per year	Coupon rate	Current price	Running yield
Bond A	\$100	\$9	9%	\$103	8.74%
Bond B	\$200	\$16	8%	\$195	8.21%
Bond C	\$100	\$7.50	7.5%	\$96	7.81%

It tells you the distributions, in percentage per annum, the portfolio currently pays. Other terms such as 'current yield' and 'income yield' may also be used to refer to this measure.

The running yield of a single bond is the annual income the bond pays divided by the current price.

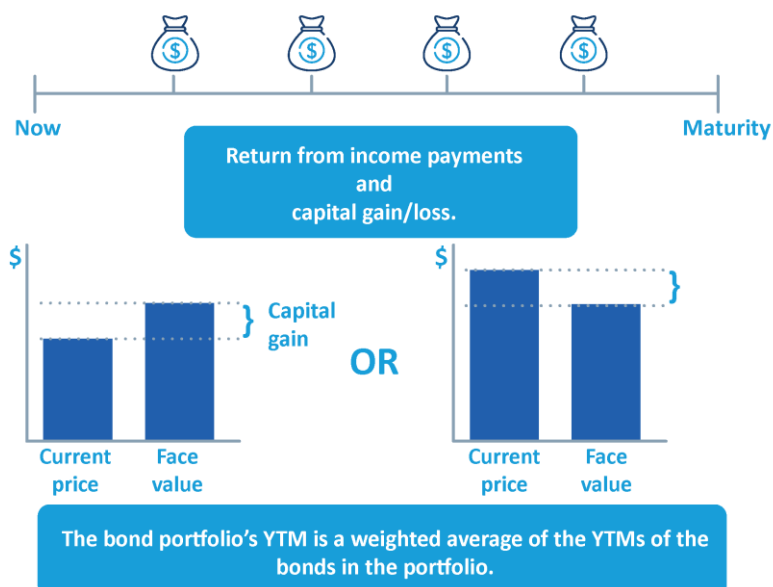
The running yield of the ETF's bond portfolio is a weighted average of the running yields of all the bonds in the portfolio.

The running yield changes as either underlying bond prices or the average coupon rate changes.

### Yield to maturity

The yield to maturity (YTM) takes into account both distributions paid by the bonds in the portfolio and any capital gain or loss the ETF will make when the bonds mature. Because of this, it is a more complete measure of return than the running yield, which does not take capital return into account.

YTM from a bond incorporates:



The YTM of a single bond incorporates both the annual income the bond pays, and the capital gain or loss that will be made if the bond is held to maturity.

The YTM of the ETF's bond portfolio is a weighted average of the YTM's of all the bonds in the portfolio.

YTM is only an indicative figure as an ETF will not necessarily hold a bond until it matures.

### Warning!

Do not be misled by a running yield that appears high!

High distributions do not necessarily equate to high returns overall. The YTM may be significantly lower.

A YTM that is significantly lower than the running yield tells you that the bonds are likely to fall in price by maturity, leading to a fall in the value of the bond portfolio and therefore in the price of the ETF.

Your apparently 'high' income is therefore likely to be offset by a fall in the value of the ETF.

Check the running yield for an indication of the income you can expect, and the YTM for an indication of your overall return.

There may be a significant difference between the current (running) yield (current yield is highlighted) and the YTM (Yield to Maturity is highlighted).

### Fund Characteristics

As of 11-Jan-2013

<b>Average Maturity in Years</b>	?	5.82
<b>Convexity</b>	?	0.36%
<b>Current Yield</b>	?	4.99%
<b>Modified Adjusted Duration</b>	?	4.60 years
<b>Number of Holdings</b>	?	51
<b>Yield To Maturity</b>	?	3.37%

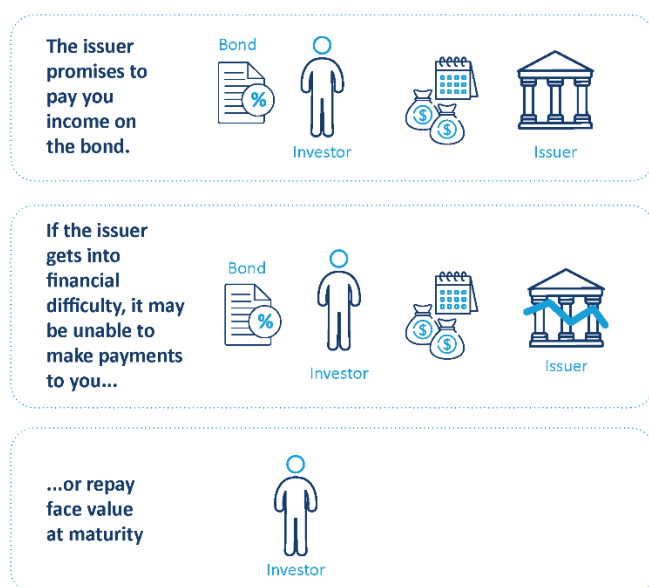
## Topic 4: Risks

Like all investments, ETFs involves risk.

Risks that are particularly relevant to fixed income ETFs are:

- credit risk, and
- interest rate risk.

For coverage of other risks that apply to all ETFs, please refer to Module 1.



### Credit risk

Investors in fixed income ETFs are exposed to the risk that a bond issuer fails to make interest payments or repay the face value on maturity.

The credit risk of the ETF varies depending on the issuers of the bonds in the ETF's portfolio.

Bonds issued by federal and state governments generally have lower credit risk than other fixed income securities.

### Interest rate risk

Change in interest rates	Likely change in	
	Long term income	ETF price
Rise	Higher	Lower
Fall	Lower	Higher

Falling interest rates may result in an increase in the value of the bond portfolio, but over the longer term may lead to a decline in the income the portfolio produces.

Rising interest rates may result in a fall in the value of the bond portfolio, but over the longer term may lead to an increase in the income the portfolio produces.

## Topic 5: Case study

### Benchmark index

Portfolio manager	Clive Smith
Benchmark index	DBIQ 5-10 year Australian Government Bond Index
Index provider	Deutsche Bank AG
Index ticker (Bloomberg)	DBLNAUSO

The Russell Australian Government Bond ETF (ASX code: RGB) is a fund that provides diversified exposure to a portfolio of Australian government fixed income securities.

It seeks to track the performance of the DBIQ 5- 10 year Australian Government Bond Index, an index provided by Deutsche Bank AG.

### Portfolio composition

#### Top 10 Holdings as of 22/10/2013


DESCRIPTION	COUPON RATE %	MATURITY DATE %	% OF ASSETS
AUSTRALIAN GOVERNMENT	5.7500	15/07/2022	22.81%
AUSTRALIAN GOVERNMENT	5.5000	21/04/2023	22.55%
AUSTRALIAN GOVERNMENT	5.7500	15/05/2021	19.30%
AUSTRALIAN GOVERNMENT	5.2500	15/03/2019	17.99%
AUSTRALIAN GOVERNMENT	4.5000	15/04/2020	16.28%
Net Other Assets	-	-	1.08%

Source: Russel Investments website

The portfolio contains a maximum of ten securities. Each security must have a minimum issuance of over \$2 billion based on face value to ensure sufficient liquidity.

At the time each bond is added to the portfolio, it has a term to maturity of between five and ten years.

### Income and costs

ASX ticker	RGB
iNAV ticker	n/a
Distribution frequency	Quarterly
ICR	0.24%
Inception date 	08-Mar-2012

Source: Russel Investments website

Distributions are paid quarterly, and may be reinvested in units in the ETF.

Management costs are 0.24% per annum.

## Measures of return

### Fund Characteristics as of 22/10/2013

DESCRIPTION	VALUE
Average Coupon Rate	5.36%
Running Yield	4.85%
Yield to Maturity	3.79%
Modified Duration	6.19

Source: Russel Investments website

The issuer's website shows current information about the fund's performance.

The fact that the running yield is higher than the YTM indicates that the value of the bond portfolio, and hence the price of the ETF, may fall over the medium term.

## Summary

- A fixed income ETF gives you exposure to a portfolio of bonds in one transaction.
- It tracks a specified index that measures the performance of a bond portfolio. The ETF invests in the bonds that make up the index.
- A fixed income ETF pays regular distributions. You can also make a capital gain (or loss) when you sell the ETF.
- The distributions you receive from an ETF vary over time.
- The best guide to the distributions you will receive is the running yield, which is a measure of the income the ETF's bond portfolio currently pays.
- The portfolio's yield to maturity (YTM) takes into account both income paid by the bonds in the portfolio and any capital gain or loss the ETF will make when the bonds mature.
- Running yield and YTM may differ significantly.
- The risk and return of a fixed income ETF depends primarily on the type of bond the ETF holds, and the issuers of the bonds in the portfolio. Bonds issued by federal and state governments generally have lower credit risk, and therefore offer lower returns, than corporate bonds.
- Your returns will also be affected by changes in interest rates.