Exchange-traded Treasury Indexed Bonds (eTIBs)

Course Module 4

Version:2 Updated: August 2025

Contents

Topic 1: Overview

There are three types of *eAGBs* traded on ASX. This module focuses on *eTIBs.* While there are important differences between the three products, you will notice some similar material between Modules 3 and 4.

	exchange-traded Treasury Bond *(eTB)* 	exchange-traded Treasury Indexed Bond *(eTIB)* 
Face value	Fixed	Variable
Coupon	Fixed	Variable
Coupon payment frequency	Every 6 months	Every 3 months
Use of proceeds raised from underlying AGB issuance	General Government expenditure	General Government expenditure

Why invest in *eTIBs*?

Being backed by the Australian Government, *eTIBs* are one of the most secure investments available with a very low risk of not receiving your interest payments or the payment of face value at maturity.

The face value of an *eTIB* is protected from erosion due to the effect of inflation. The face value of an *eTIB* is adjusted for movements in the Consumer Price Index (CPI). As a result, inflation does not diminish the real return of your investment.

eTIBs also pay a regular income stream that changes in line with inflation. Whilst an *eTIB* has a fixed coupon rate, the actual coupon payment will change in line with changes to the inflation adjusted value of the *eTIB's* face value.

eTIBs can be readily bought and sold on market. This means your money is not locked into a fixed investment term as is the case with term deposits.

The market price of *eTIBs* is typically more stable than share prices.

Investment needs	*eTIB* features
I want income	Regular interest payments
I want a low-risk investment	Strong credit standing
Protection from the impact of inflation	Face value & coupon payment adjusts in line with changes to CPI
I don't want to be locked in	Traded on ASX listed market

Differences between *eTIBs* and *eTBs*

Face value adjusts for inflation

The face value of an *eTIB* is adjusted for inflation. This contrasts with an *eTB*, where the face value is fixed.

An *eTIB's* face value is adjusted every quarter by the six-month delayed Consumer Price Index (CPI).

The market price of the *eTIB* can be expected to reflect this change in face value. At maturity you receive the adjusted face value and the final coupon payment. In the unlikely event of a period of sustained deflation, the face value returned at maturity cannot be less than $100.

You can find out about the adjustment amount, also known as the Kt Factor, via the Market Announcements Platform on the ASX website. You can search for recent adjustment announcements by typing in the first three characters for an *eTIB's* ASX code – 'GSI'.

Coupon rate is fixed but the dollar value of your income will change

During the life of an *eTIB*, because its face value changes, the dollar value of the coupon payments also changes.

Whilst an *eTIB's* coupon rate is fixed, each coupon payment is calculated on the adjusted face value.

You can expect to receive a higher coupon payment, if the face value of the *eTIB* is adjusted upwards due to rising CPI.

The coupon for an *eTIB* is paid every three months (unlike *eTB* coupons which are paid every six months).

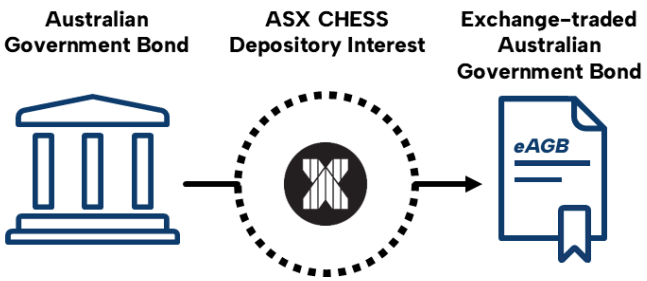
Differences in coupon payments

Date	*eTB*	*eTIB*
March	$2.25	$1.17
June		$1.17
September	$2.25	$1.19
December		$1.19

Similarities between *eTIBs* and *eTB*

In the same way that *eTBs* replicate all the essential features of Treasury Bonds traded in the wholesale market, *eTIBs* replicate all the essential features of Treasury Indexed Bonds traded in the wholesale market.

In order to facilitate trading by retail investors, *eTIBs* are settled using the CHESS Depositary Interest (CDI) mechanism, in the same way that *eTBs* work. Further information about CDIs generally can be obtained on the ASX website.



You have a choice of coupon rates and maturity dates

The Australian Government issues bonds periodically according to their funding requirements.

In order to manage its own liquidity and risk, the Government issues bonds with different maturities and coupons. The coupon rate offered on an *eTIBs* usually reflects prevailing interest rates at the time of issue.

There is a large range of *eTIBs* available, each with its unique ASX Code, different coupon rate and maturity. The *eTIBs* available at March 2025 is shown in the table to the right.

The current list of *eTIBs* is available on the ASX website

eAGB type	Code	Coupon rate	Maturity date
Treasury Index Bond – TIB	GSIQ25	3.00%	20 September 2025
Treasury Index Bond – TIB	GSIU27	0.75%	21 November 2027
Treasury Index Bond – TIB	GSIQ30	2.50%	20 September 2030
Treasury Index Bond – TIB	GSIU32	0.25%	21 November 2032
Treasury Index Bond – TIB	GSIO35	2.00%	21 August 2035
Treasury Index Bond – TIB	GSIO40	1.25%	21 August 2040
Treasury Index Bond – TIB	GSIC50	1.00%	21 February 2050

Topic 2: Income and price

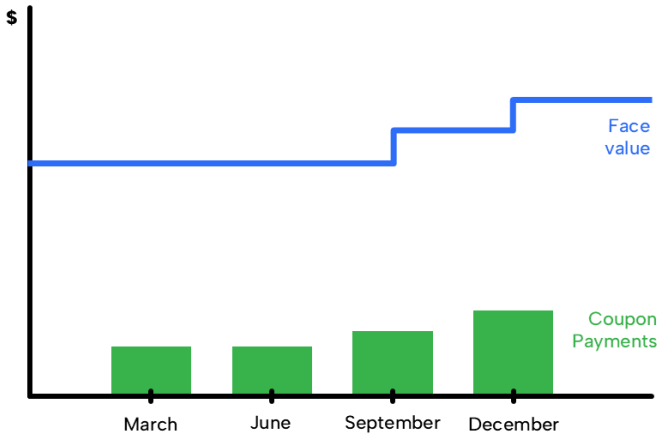
Coupon rate is fixed but your cash payment changes

The coupon rate for an *eTIB* is fixed. This rate is expressed as a percentage of an *eTIB's* face value.

Because the face value of an *eTIB* is adjusted for inflation, the cash payment amount for an *eTIB* may vary between coupon payments.

You do not know an *eTIB's* face value at maturity, because it will continue to be adjusted in line with movements in quarterly CPI.

Consequently, you cannot precisely calculate the future coupon payments or the face value you will receive at maturity for an *eTIB*.



Calculating an *eTIB's* coupon payment

The calculation for immediately upcoming payments is straightforward when you know the adjusted face value.

For example, if an *eTIB* has a coupon rate of 3.0% per annum and a CPI adjusted face value of $105, your next payment ('coupon') would be $0.7875. Calculations are made to 4 decimal places with the total payment per holder rounded to the nearest cent. Coupon payments for *eTIBs* are made four times per year (quarterly). An *eTIB's* quarterly coupon payment can be calculated using the formula:

Adjusted face value (aFV)	Coupon rate (R)	Coupon
$105	3.0%	$0.79
$120	2.0%	$0.60

Coupon = aFV x R / 4

Where:

- aFV = the CPI adjusted face value
- R = the fixed coupon rate per annum

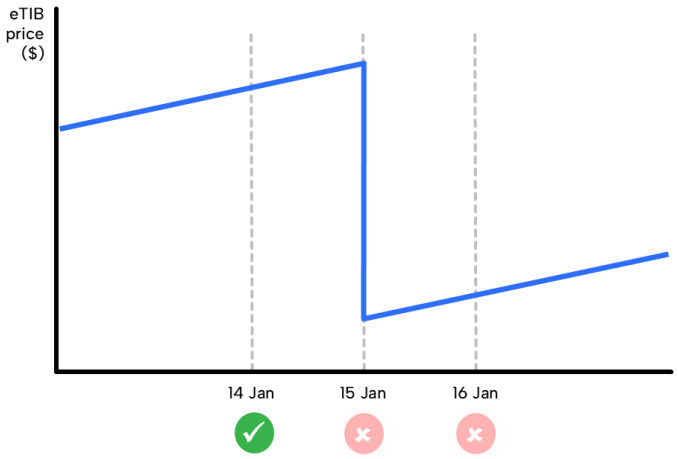
Because their face value and coupon payments reflect changes in the CPI, *eTIBs* protect the value of your investment from declining due to the effect of inflation.

Market price of an *eTIB* includes accrued interest

The market price of an *eTIB* includes the interest that has accumulated since the last coupon payment. This means you can expect the price of an *eTIB* to increase incrementally each day as a coupon payment approaches and then adjust downwards by the value of the coupon on the ex-interest date.

The ex-interest date is important to understand. To be entitled to the current coupon payment you must hold the *eTIB* before the ex-interest date. If you purchase the *eTIB* on or after the ex-interest date you are not entitled to the current coupon payment.

Bond market professionals sometimes use the term the 'dirty price' to refer to the market price that includes accrued interest and the term 'clean price' for the price without the accrued interest.



Pricing example of interest accruing

An *eTIB* with a 4.0% coupon rate is due to pay a coupon on the adjusted face value of $115. Interest accrues at the rate of approximately 1.26 cents per day over the quarter [($115 × 4% / 4)/(365/4)]. The market price of the *eTIB* incorporates this accrued interest.

The market price can be expected to increase as the ex-interest date approaches, and then to drop by the quarterly interest payment ($1.15) on the ex-interest date.

This is similar a share price falling on the ex-date for a dividend.

Topic 3: Realising your investment

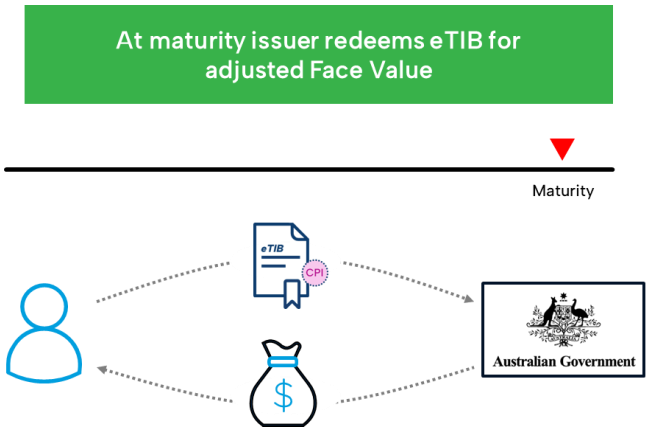
Holding an *eTIB* until maturity or selling beforehand

You can realise your investment in an *eTIB* by holding it until maturity or selling it beforehand.

At maturity

If you hold an *eTIB* until maturity, you will receive the CPI adjusted face value and the last coupon.

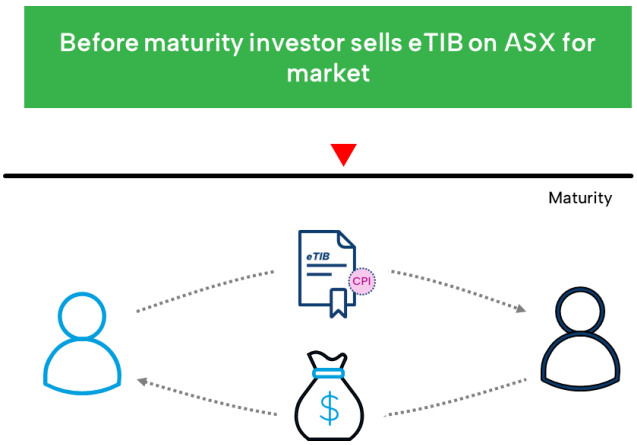
When an *eTIB's* face value is paid out, it is called 'redemption'.



Before maturity

If you want to exit your investment before maturity, you will have to sell your *eTIB*. The value you receive for your investment is determined by the price of the *eTIB* in the market.

When you sell on market there is no guarantee you will receive either what you bought the *eTIB* for or its face value.

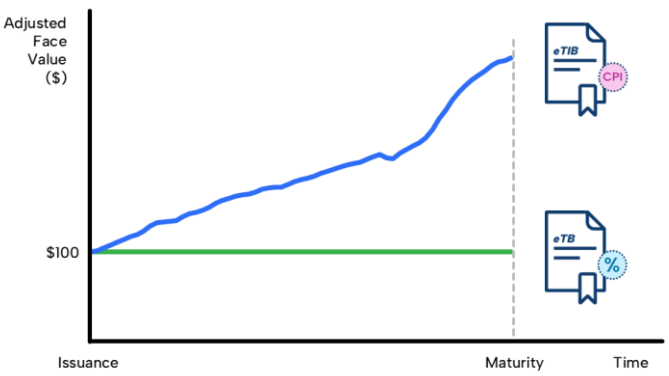


Adjusting the TIB's face value

The face value for an *eTIB* is adjusted every quarter by a 6-month delayed CPI amount.

Detailed information about the adjustment (known as the Kt factor) is contained in the Investor Information Statement Exchange-traded Treasury Indexed Bonds (*eTIBs*) published by the Australian Government.

Adjustments are announced via the Market Announcements Platform on the ASX website. You can search for recent adjustment announcements by typing in the first three characters for a *eTIB's* ASX code – 'GSI'.



Why the face value for an *eTIB* can be different to its market price

There are two factors that influence the difference between the face value and the market price of the *eTIB*.

1. If market interest rates have changed since the time the *eTIB* was issued, the *eTIB's* price will probably have changed too. As noted in Module 2, there is an inverse relationship between an *eTIB's* interest rate and market price:
   - as interest rates rise, market prices fall, and
   - as interest rates fall, market prices rise.
2. Face value is adjusted in line with changes in CPI. Market price will include expectations of future CPI changes. This difference contributes to the difference in market price versus face value.

Capital gain/loss on redemption or sale

If you buy an *eTIB* and hold until maturity, you may make a capital gain/loss depending on the difference between your purchase price and the adjusted face value you receive at maturity.

If you buy and sell an *eTIB* on ASX, you may make a capital gain/loss depending on the difference between your purchase price and your sale price.

Any capital gain/loss you make on redemption or sale of your *eTIB* should be taken into account when you consider your after-tax overall return from the *eTIB*.

Your total return on an *eTIB* includes:

- regular interest payments, and
- any capital gain/loss on redemption or sale.

Calculating your return

An *eTIB's* yield to maturity (YTM) captures both the income you will earn via coupon payments and any expected capital gain or loss should you hold the *eTIB* to maturity.

Using YTM enables you to compare *eTIBs* with different coupons and different prices. (For more information on YTM, see Module 2)

When you calculate the YTM for an *eTIB* the return may look quite low, this is because *eTIBs* are quoted and traded on a real YTM basis – if you add the current inflation rate to the *eTIB's* yield, you will get a YTM that is a better comparison with that of an *eTB*.

Assume inflation is 2%	Yield to maturity	Return in real terms
eTIB	0.4%	0.4%
eTB	2.5%	0.5%

What happens to *eTIBs* if deflation occurs?

The face value is adjusted downward, and your interest payments are less than they would be if inflation occurred, or if the CPI remained unchanged.

In the unlikely event of a period of sustained deflation, the face value returned at maturity cannot be less than $100.

There is also a minimum value on any coupon payment such that the value of the payment never falls below the coupon's initial value.

Topic 4: Example of *eTIBs* trading at different prices

Looking at the range of *eTIBs* on issue

The range of *eTIBs* on issue will change as maturity dates are reached and new series are issued.

This topic's example will reference the table of *eTIBs* on the right.

eTIB	Coupon rate	Maturity	Price (at 30 June 2025)	YTM (at 30 June 2025)
GSIQ25	3.00%	20-Sep-25	151.83	1.58%
GSIU27	0.75%	21-Nov-27	126.25	1.02%
GSIQ30	2.50%	20-Sep-30	155.45	1.45%
GSIU32	0.25%	21-Nov-32	106.10	1.80%
GSIO35	2.00%	21-Aug-35	137.29	2.08%
GSIO40	1.25%	21-Aug-40	113.46	2.39%
GSIC50	1.00%	21-Feb-50	88.12	2.67%

Why are *eTIB* coupon rates lower than TB rates?

The coupon rate for an *eTIB* and *eTB* is set at the time of the issue.

The additional inflation-protection component of an *eTIB* is the reason why the coupon rate on an *eTIB* is generally lower than on an *eTB*.

Remember that an *eTIB's* face value is automatically adjusted in line with the CPI. In an inflationary environment, an investment in *eTIBs* will ensure that your investment isn't eroded by inflation.

Different coupon rates & maturities = different prices

Each *eTIB* has a different coupon and/or maturity date and different price. The price of the eTIB is impacted on two factors:

1. Generally, an *eTIB* which was issued at an earlier date (has been in the market for a longer period) will have an adjusted face value that is likely to be higher than an *eTIB* issued more recently. This is because of the adjustment or indexing of the face value in line with inflation.
2. Generally, an *eTIB* with a higher coupon rate will trade at a higher price than an *eTIB* with a similar maturity but lower coupon.

For example, GSIQ30 maturing in September 2030 has a coupon of 2.50% and was originally issued more than 8 years earlier than GSIU32 which matures in November 2032 and has a coupon of 0.25%.

Even though the maturity date of the two securities is relatively close, the difference in when the bonds were first issued (and thus the amount of CPI adjustment of the face value) when combined with the coupon rate, will mean that the price they trade at in the market is likely to be different, perhaps significantly so.

eTIB	Coupon rate	Maturity	Adjusted face value (at 30 June 2025)	Price (at 30 June 2025)	YTM (at 30 June 2025)
GSIQ25	3.00%	20-Sep-25	151.78	151.83	1.58%
GSIU27	0.75%	21-Nov-27	127.24	126.25	1.02%
GSIQ30	2.50%	20-Sep-30	148.06	155.45	1.45%
GSIU32	0.25%	21-Nov-32	119.30	106.10	1.80%
GSIO35	2.00%	21-Aug-35	137.25	137.29	2.08%
GSIO40	1.25%	21-Aug-40	131.70	113.46	2.39%
GSIC50	1.00%	21-Feb-50	124.82	88.12	2.67%

Different coupon rates & maturities = different prices

In our example, on 30 June 2025 GSIQ30 was trading at $155.45. The adjusted face value at this time was $148.06.

At the same time, the market price for GSIU32 was $106.10. The face value at the time was $119.30.

What explains such a big difference in the market price, amount of accrued interest and face value?

eTIB	Coupon rate	Maturity	Adjusted face value (at 30 June 2025)	Price (at 30 June 2025)	YTM (at 30 June 2025)
GSIQ25	3.00%	20-Sep-25	151.78	151.83	1.58%
GSIU27	0.75%	21-Nov-27	127.24	126.25	1.02%
GSIQ30	2.50%	20-Sep-30	148.06	155.45	1.45%
GSIU32	0.25%	21-Nov-32	119.30	106.10	1.80%
GSIO35	2.00%	21-Aug-35	137.25	137.29	2.08%
GSIO40	1.25%	21-Aug-40	131.70	113.46	2.39%
GSIC50	1.00%	21-Feb-50	124.82	88.12	2.67%

Looking at the GSIU32

If you purchased GSIU32 on 30 June 2025, you would have received a coupon of $0.0746 on the next coupon date being 21 August 2025.

Thereafter you would receive quarterly coupon payments of 0.25% per annum (equating to a quarterly coupon of 0.0625% of the CPI adjusted face value).

On maturity, you would receive the CPI adjusted face value and the final coupon of 0.25% per annum (e.g. 0.0625%) on the adjusted face value.

Since its issuance date, the face value has been steadily adjusted upwards – from $100.00 to $119.30 as at 30 June 2025.

eTIB	Coupon rate	Maturity	Adjusted face value (at 30 June 2025)	Price (at 30 June 2025)	YTM (at 30 June 2025)
GSIQ25	3.00%	20-Sep-25	151.78	151.83	1.58%
GSIU27	0.75%	21-Nov-27	127.24	126.25	1.02%
GSIQ30	2.50%	20-Sep-30	148.06	155.45	1.45%
GSIU32	0.25%	21-Nov-32	119.30	106.10	1.80%
GSIO35	2.00%	21-Aug-35	137.25	137.29	2.08%
GSIO40	1.25%	21-Aug-40	131.70	113.46	2.39%
GSIC50	1.00%	21-Feb-50	124.82	88.12	2.67%

Summary

- *eTIBs* pay you a fixed rate of interest (the coupon rate) based on their CPI adjusted face value. Interest is paid four times a year in arrears.
- At maturity, you are paid the CPI adjusted face value and the final coupon.
- If you want to sell your *eTIBs* before maturity, you can do so on market at the prevailing market price, which may be above or below the face value.
- An *eTIB*'s market price may be different from its face value. Consequently, you may make a capital gain or loss if you either buy or sell an *eTIB*.
- Your total return from an *eTIB* therefore includes:
  - regular interest payments, and
  - any capital gain/loss on redemption or sale.
- Some risks of holding *eTIBs* are:
  - interest rates may move up, causing a fall in the *eTIBs* market price and an increased potential for capital loss if you needed to sell before maturity, and
  - deflation may reduce your coupon payment amounts.