

Topic 1: Fixed vs. floating rate.....	3
Choosing an interest rate security.....	3
Fixed vs. floating.....	3
Fixed or floating?	4
Fixed and floating?	4
Topic 2: Interest vs. dividends	5
Franking.....	5
Published payment rate	5
How much cash do I get if I am paid in dividends?.....	6
A question of timing	6
Interest or dividends?.....	6
Topic 3: Calculating your return.....	8
Coupon rate.....	8
Running yield.....	9
Yield to maturity	9
Yield to maturity (continued)	9
Frequency of payments	10
Topic 4: Yield and price	11
What if market interest rates fall?	12
Topic 5: Return and risk	13
Credit risk and yield	13
Features of the security - interest vs. dividends	13
What happens if the issuer misses an income payment to you?	14
Other features.....	14
Summary.....	15

Information provided is for educational purposes and does not constitute financial product advice. You should obtain independent advice from an Australian financial services licensee before making any financial decisions. Although ASX Limited ABN 98 008 624 691 and its related bodies corporate ("ASX") has made every effort to ensure the accuracy of the information as at the date of publication, ASX does not give any warranty or representation as to the accuracy, reliability or completeness of the information. To the extent permitted by law, ASX and its employees, officers and contractors shall not be liable for any loss or damage arising in any way (including by way of negligence) from or in connection with any information provided or omitted or from any one acting or refraining to act in reliance on this information.

© Copyright 2013 ASX Limited ABN 98 008 624 691. All rights reserved 2013.

All Ordinaries®, All Ords®, AllOrds®, ASX®, ASX100®, CHESS®, ITS® are registered trademarks of ASX Operations Pty Limited ABN 42 004 523 782 ("ASXO").

ASX20™, ASX50™, ASX200™, ASX300™ are trade marks of ASXO.

S&P™ is a trademark of Standard and Poor's, a division of The McGraw-Hill Companies Inc.

Topic 1: Fixed vs. floating rate

Choosing an interest rate security

There are several types of interest rate security, each with different characteristics. Within each type, product features can vary significantly. No two interest rate securities are identical.

In trying to choose between interest rate securities, important questions to ask are:

- What income will I receive?
- How do I get my money back?
- What are the risks?



In this module, we look at the income you get from an interest rate security.

In Module 3, we look at how you get your money back from an interest rate security.

In both modules, risk will be an important part of the discussion.

Fixed vs. floating

Some interest rate securities pay a fixed rate of income, others pay a floating rate.

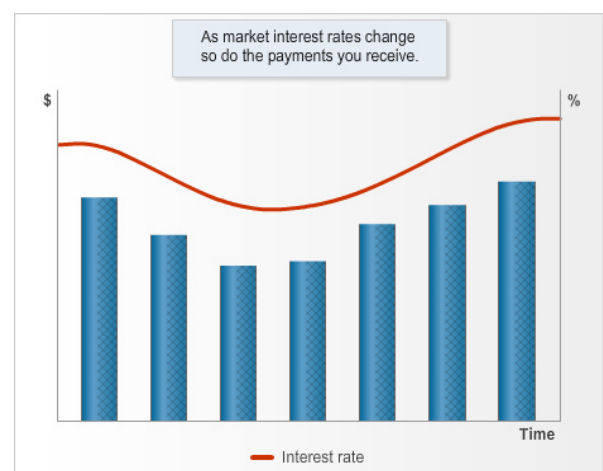
With a fixed rate, your payments do not vary, so you know exactly how much income you will receive.

The security's prospectus specifies the payments you will receive as an annual percentage of the face value of the security. (Face value is the amount the interest rate security was issued at - usually \$100.)

With a floating rate, payments are linked to a market interest rate which is known as the reference rate.

As the reference rate changes so too do the payments you receive. At regular intervals, for example at the start of each quarter, the payment rate is adjusted to reflect changes in the reference rate.

The reference rate may be, for example, the Bank Bill Swap rate (BBSW). BBSW is a rate used in Australian financial markets to price a wide range of securities.



The prospectus typically specifies that payments will be made at the reference rate plus a margin, for example BBSW+2.5%.

As interest rates rise, your income increases.
As rates fall, your income decreases.

Fixed or floating?

Fixed

The benefit of a fixed rate is that you know exactly how much income you will receive.

If interest rates fall, your payments stay the same. If rates rise you do not receive increased payments.

Investors who think rates will fall may prefer the exposure a fixed rate offers.

Floating

A floating rate means you are exposed to changes in interest rates.

If rates rise, you will benefit from higher payments. If rates fall, your income will be lower.

Investors who think rates will rise may prefer the exposure a floating rate offers.

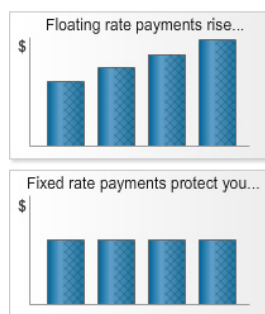
Interest rates	Fixed rate payments	Floating rate payments
↑	unchanged	up
↓	unchanged	down

Fixed and floating?

If you plan to invest in several interest rate securities, you may decide on a mixture of fixed and floating rate.

Having some exposure to market rates via floating rate securities means you will benefit if rates rise. Investing some of your funds in fixed rate securities means part of your income is 'locked in' if rates fall.

Having a foot in both camps is not unlike fixing part of your home loan, but leaving the rest in a variable loan.



Topic 2: Interest vs. dividends

Some interest rate securities (such as corporate bonds and convertible notes) pay distributions in the form of interest. Others (such as preference shares) pay in the form of dividends.

While you receive both types of payment in cash, there are important differences.

Franking

An interest payment is fully taxable.

A dividend payment may have a franking credit attached, to reflect tax the company has already paid. This amount must be added to your taxable income, but the credit can be used to offset tax payable on your earnings.

Note: Dividends on interest rate securities are expressed differently to dividends on ordinary shares. Dividends on an interest rate security are typically presented as a percentage of the security's face value, whereas dividends on ordinary shares are expressed as cents per share.

Published payment rate

It is important to compare published distribution rates on an 'apples with apples' basis.

If your interest rate security pays interest, the cash payment you receive is the same as the published distribution rate.

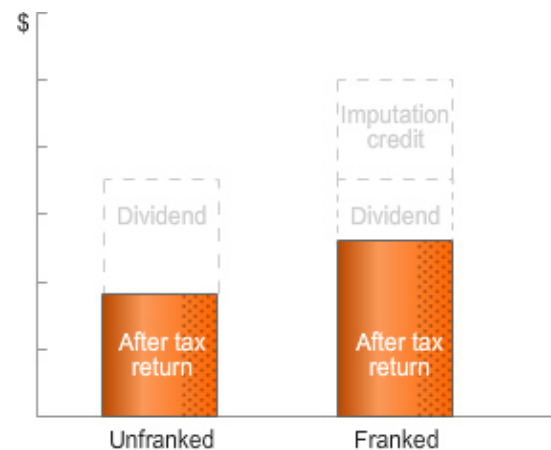
If your interest rate security pays a franked dividend, the gross distribution rate (published distribution rate) typically comprises:

- an amount you receive in cash, and
- the franking credit.

This rate is a 'gross' rate because it includes the value of the franking credit.

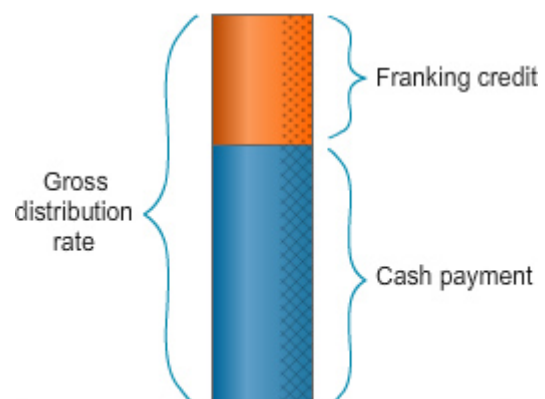
The amount you actually receive in cash is therefore less than the published rate.

Interest rate security	Distributions
Corporate bonds	Interest
Preference shares	Dividends
Convertible notes	Interest



Following the investor paying their marginal rate of tax, the franked dividend provides a larger net return.

Gross distribution rate includes cash payment and franking credit.



How much cash do I get if I am paid in dividends?

If you know the gross distribution, you can calculate the cash payment fairly easily.

If a dividend is fully franked at the company tax rate of 30%:

- cash payment = gross distribution x 70%
- franking credit = gross distribution x 30%.

While the cash you receive is less than the gross distribution, the franking credit can be offset against tax payable on your earnings.

The diagram opposite gives two examples.

A question of timing

The distinction between interest and franked dividends mainly comes down to how and when you receive your money.

If your interest rate security pays you interest, you receive the entire amount in cash, but must pay tax on the full amount later on.

If your security pays you a fully franked dividend, you receive a smaller amount in cash, but tax at the company tax rate has already been paid. Depending on your marginal tax rate, you may have no more tax to pay on the income.

If two interest rate securities, one paying interest and the other a franked dividend, pay the same gross distribution rate your after-tax returns will be the same regardless of how you receive your income.

The table opposite shows the cash payment and after tax returns for an investor with a marginal tax rate of 30%, receiving a 10% distribution as:

- interest, or
- fully franked dividend.

Interest or dividends?

Should you look for interest rate securities paying interest, or interest rate securities paying franked dividends?

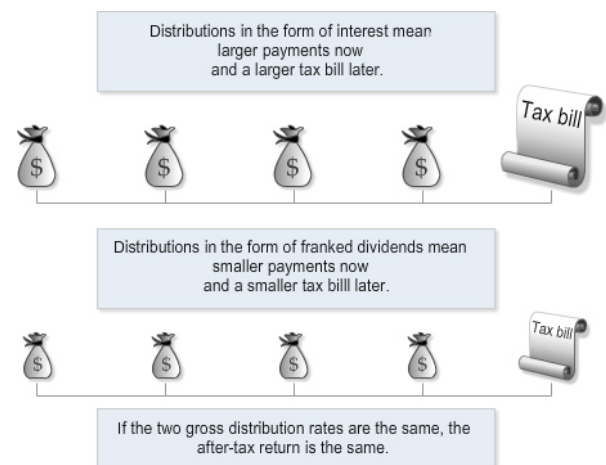
If your interest rate security pays a 10% distribution as a fully franked dividend, you receive:

- 7% in cash, and
- 3% as a franking credit.

If your interest rate security pays an 8% distribution as a fully franked dividend, you receive:

- 5.6% in cash, and
- 2.4% as a franking credit.

Distribution rates	Breakdown of distribution		Calculation
10%	Cash payment	7%	= 10% x 70%
	Franking credit	3%	= 10% x 30%
8%	Cash payment	5.6%	= 8% x 70%
	Franking credit	2.4%	= 8% x 30%



	Interest	Dividend
Distribution rates	10%	10%
Cash payment	10%	7%
Franking credit	-	3%
Taxable income	10%	10%
Tax payable (30% rate)	3%	3%
Tax credit	-	3%
Net tax payable	3%	-
After tax return	7%	7%

The answer to this question depends largely on your personal situation and taxation circumstances.

You should consult your financial adviser about whether one type of distribution or the other would be better for you.

For more information on franking credits, refer to the [Australian Taxation Office](#).

Topic 3: Calculating your return

An essential part of evaluating an interest rate security is looking at the return you will make on your investment.

The returns include:

- defined income payments, and
- repayment of face value at maturity.

Some securities convert into ordinary shares instead of repaying face value, but for this discussion about rates of return, we will assume that at maturity you receive the face value in cash.

There are three different rates of return commonly used to evaluate interest rate securities:

- coupon rate
- running yield, and
- yield to maturity.

The first two measures take into account only the income you receive from your interest rate security. Yield to maturity takes into account both income payments and repayment of the security's face value at maturity.

Let's look at these terms in more detail.

Coupon rate

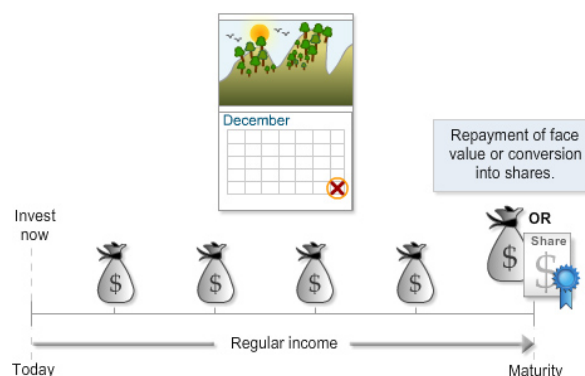
The coupon rate is the income paid annually, expressed as a percentage of the face value of the security. It is set by the issuer, and specified in the prospectus.




For example, a fixed rate security with a coupon of 8% and a face value of \$100 pays coupons (income) totalling \$8 each year ($\$8/\$100 \times 100\% = 8\%$).

The coupon rate of a fixed rate security is fixed for the life of the security.

The coupon rate of a floating rate security changes as the reference interest rate varies. The coupon at each payment date may be a different amount.

You can find a security's coupon rate on www.asx.com.au or on the issuer's website.



Rate of return	Reflects
Coupon rate	 Income as a percentage of face value
Running yield	 Income as a percentage of market price
Yield to maturity	 Income and Repayment of face value

	Face value	Coupon payments per year	Coupon rate
Security A	\$100	\$9	9%
Security B	\$200	\$16	8%
Security C	\$100	\$7.50	7.5%

Running yield

The running yield is the income paid annually, expressed as a percentage of the market price. As the market price changes, running yield changes.

Assume an interest rate security with a coupon of 8% and a face value of \$100 is trading at \$98:

Running yield = $\$8/\$98 \times 100\% = 8.16\%$.

Once the interest rate security starts trading on ASX, the running yield is a more useful measure of income than the coupon rate, as it is based on the market price, rather than the security's face value.

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

Yield to maturity

Yield to maturity is generally regarded as the most important rate of return.

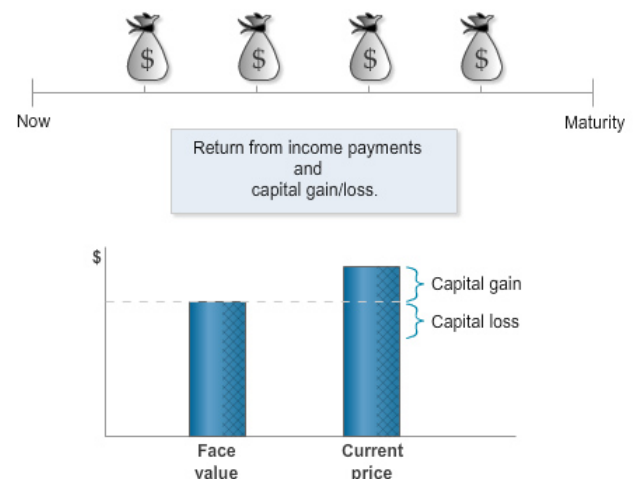
It gives your overall return if you hold the security until maturity, and incorporates:

- your regular income payments, and
- your capital gain/loss - any difference between the price you pay for the security and the face value you will be repaid at maturity.

For a floating rate security, the yield assumes the current income rate applies to maturity.

Yield to maturity is especially relevant if you buy on market, as it takes into account the price you pay. For example, if you purchase a security for less than face value, you will make a capital gain at maturity when you are repaid face value.

Yield to maturity incorporates:



Yield to maturity (continued)

Yield to maturity is the most complete measure of returns if you plan to hold the securities until maturity.

Comparing securities on the basis of coupon rate or running yield does not take into account the return of face value at maturity.

Yield to maturity captures both income payments and capital gain/loss, enabling you

Description	Rate of return
Income as a percentage of market price	Running yield
Income as a percentage of face value	Coupon rate
Return incorporating both income and capital gain/loss	Yield to maturity

to compare securities with different coupons and different prices.

The calculation of yield to maturity is not as simple as the calculation of coupon rate or running yield. You can get the yield to maturity from your broker.

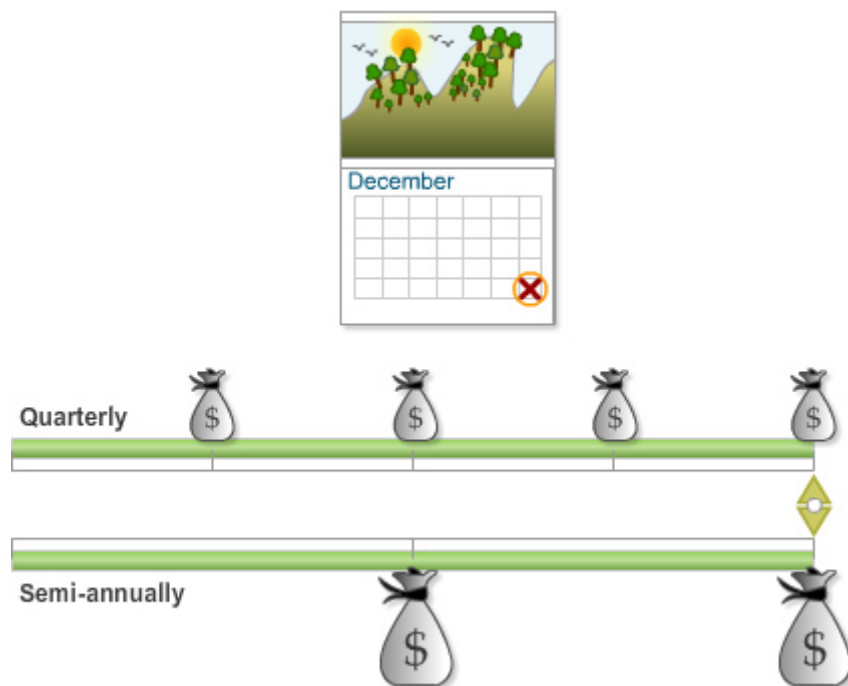
Frequency of payments

Your return is affected by how often you receive your income.

Income is usually paid in arrears, either quarterly or semi-annually (twice a year). 'In arrears' means you receive your payment at the end of the period over which the income is earned.

Fixed rate securities typically pay interest twice a year, floating rate securities pay four times.

All else being equal, the more often you receive income the better. Receiving your income earlier means you can reinvest it sooner to produce more income.



Topic 4: Yield and price

In the previous topic, we identified one part of your overall return as the difference between the price you pay for the security and the face value you will be repaid at maturity (capital gain/loss).

Knowing that at maturity you will be paid face value by the issuer, why would you ever expect to pay more or less for a security than its face value?

To answer this question, we need to look at the relationship between price and yield. This relationship is important to understand when you are considering securities that pay a fixed rate of income.

At the time of issue, a company sets a payment rate it thinks will be attractive to investors and that takes into account current market interest rates.

Assuming investors agree that the rate is fair, they will be prepared to pay face value for the securities.

If the investor holds the security to maturity, their yield is the same as the coupon payment rate.

Example

A company issues a security with a fixed coupon rate of 8% and a face value of \$100.

Investors get their \$100 back at maturity and along the way receive income of \$8 annually.

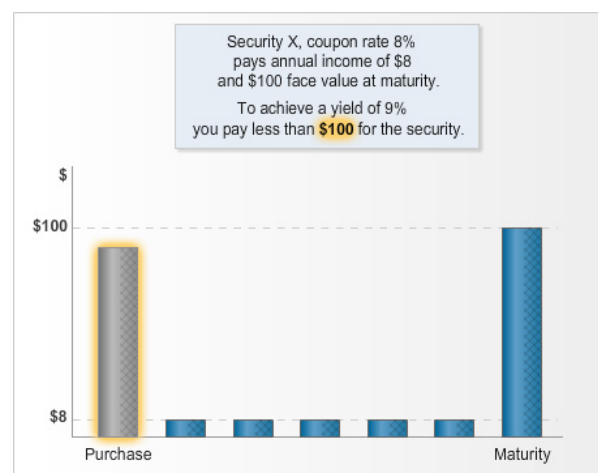
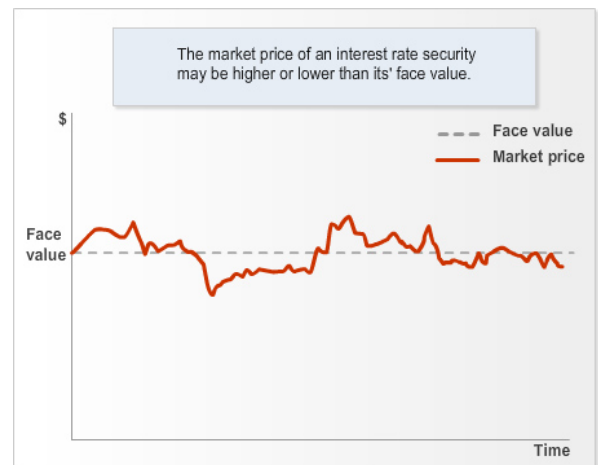
Assume that after the security starts trading on ASX, market interest rates rise by 1%.

The coupon rate of 8% is now not so attractive to other investors as new issues of similar securities are likely to have a coupon around 9%.

You might be prepared to buy a security offering a coupon of only 8% however if you were able to buy that security on market for less than face value.

If you pay less than \$100:

- your annual income of \$8 is more than 8% of the price you pay, and



- you make a capital gain when you are paid the \$100 face value at maturity.

If the price you pay is low enough you can achieve a yield of 9% from a security that pays an 8% coupon.

What if market interest rates fall?

In this case, the 8% coupon rate is maintained and new issues of similar securities will most likely pay a lower rate of income.

New investors in this security will have to pay above face value in return for the right to receive the higher rate of income.

For example, you might be prepared to pay \$105, accepting a \$5 loss when you are repaid the \$100 face value at maturity.

So for securities paying a fixed rate of income, there is an inverse relationship between yield and price:



- as yields rise, prices fall, and
- as yields fall, prices rise.

Income payments do not vary, so the market price changes when interest rates change.

The market price of floating rate securities is not affected in the same way.

Income payments are adjusted when there is a change in interest rates, so the market price of the security generally does not change.



Yield		Fixed rate security	Floating rate security
	Income	Unchanged	Up
	Price	Down	Unchanged
	Income	Unchanged	Down
	Price	Up	Unchanged

Topic 5: Return and risk

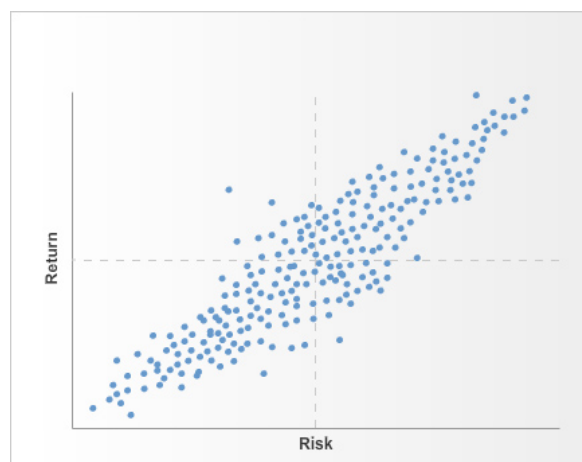
Selecting an interest rate security is not just a matter of looking for the security that pays the highest return. You need to consider the risk involved.

The main risks you face are:

- not receiving the promised income,
- not getting your money back at maturity, and
- not being able to sell at face value prior to maturity.

In this topic we consider risks relating to your income. In Module 3 we look at risks relating to repayment of your initial investment.

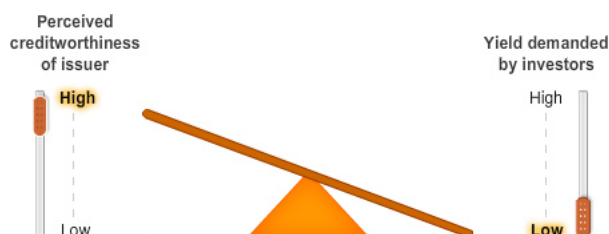
As is the case with most investments, there is a link between the potential return from an interest rate security and the risk it involves. Securities with the highest yield are likely to be those regarded as having the most risk.



Credit risk and yield

Where the coupon rate or the running yield payable on otherwise similar securities vary significantly it may be that the market considers there to be significantly different credit risk.

Where yields or coupon rates vary significantly between similar securities an investor should consult their adviser on the possible reasons for this disparity.



Features of the security - interest vs. dividends

The form in which income is paid can affect the risk of not receiving your income.

There is less risk attached to the payment of interest than to the payment of dividends, as interest payments rank before dividends. A company may pay dividends only after it has met its debt obligations to banks and other creditors.

Although payment of dividends ranks lower than payment of interest, dividends to holders of interest rate securities rank before dividends to ordinary shareholders.

Order of payment	Type of payment
1	Interest to holders of interest rate securities
2	Dividends to holders of interest rate securities
3	Dividends to ordinary shareholders

What happens if the issuer misses an income payment to you?

In some cases a missed payment means that the issuer is in default under the terms of issue. The prospectus will state the consequences of a default event.

In other cases the prospectus may nominate distributions on the interest rate security as cumulative or non-cumulative.

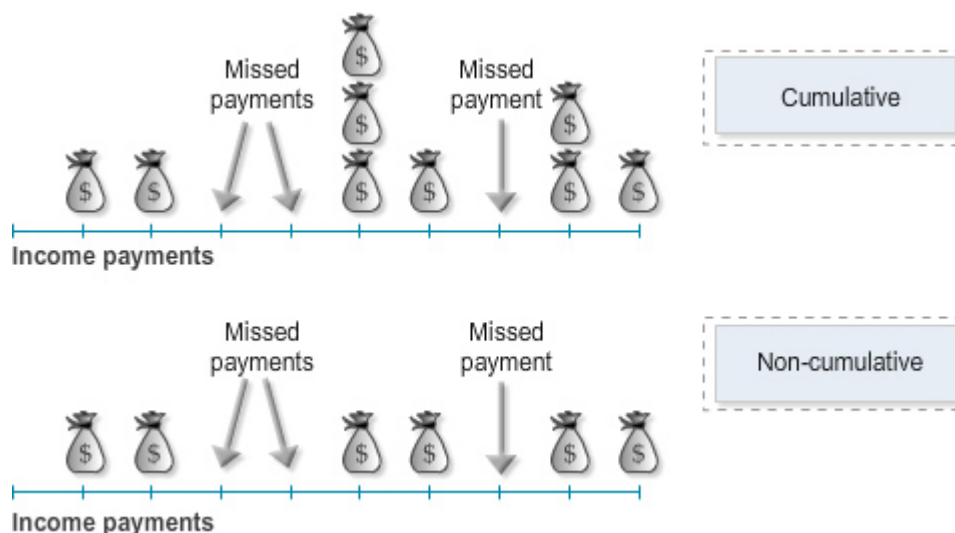
If your security is **cumulative**, the issuer must add the missed amount to future payments. In other words, missed payments accumulate until they are paid.

If your security is **non-cumulative**, a missed payment is foregone forever.

Other features

Given the widely varying features of different securities, it is not possible to outline all the factors that can contribute to a security's risk.

It is essential to read the prospectus to become familiar with any other factors that might affect the risk attached to the income from an interest rate security.



Summary

In evaluating an interest rate security, it's important to look at how much income you will receive, and in what form.

An interest rate security may be:

- fixed rate, with payments that do not vary, or
- floating rate, with payments linked to a market interest rate such as the Bank Bill Swap rate (BBSW).

Payments may be in the form of:

- interest (e.g. corporate bonds), or
- dividends (e.g. preference shares), which may have franking credits attached.

There are three different rates of return commonly used to evaluate interest rate securities:

- coupon rate
- running yield, and
- yield to maturity.

Yield to maturity is the most important of these as it captures both income payments and capital gain/loss, enabling you to compare securities with different coupons and different prices.

There is a link between the potential return from an interest rate security and the risk it involves.

Risks is linked to:

- creditworthiness of the issuer, and
- particular features of the security.