ASX
AUSTRALIAN STOCK EXCHANGE

Bonds & Hybrids

a wise choice for a regular income stream

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The ASX Interest Rate Market

The ASX Interest Rate Market is a market where you can buy and sell debt securities, such as bonds, as easily as shares. Just as you can instruct your broker to buy shares in a company for you, you can now instruct your broker to buy corporate bonds for you.

The market was established in 1999 and operates on the same trading and settlement systems as the sharemarket. The minimum amount you can invest is $500 but the usual transaction value recommended by brokers is $5,000 and over.

Currently, over 90 issues of corporate bonds, floating rate notes, convertible notes, hybrid securities (such as convertible preference shares) and credit linked notes are available for trading.

This booklet will help you understand why ASX Interest Rate Securities may be a worthwhile addition to your portfolio and how to go about investing in them. After reading this booklet, please feel free to visit our website at **www.asx.com.au/irm.htm** for more information including a **free** online course.

amount you paid for it.

Why invest in Interest Rate Securities?

Interest Rate Securities are sometimes referred to as bonds, and, there are a variety of reasons you should consider investing in Interest Rate Securities including:

- receive a steady and reliable income stream
- improve the return on your capital typically held as cash
- diversify your portfolio and reduce your risk
- profit from expected movements in interest rates
- hedge the interest rate exposure on your own debt
- preserve the value of your capital while you wait for new investment opportunities

Differences between Interest Rate Securities and shares

When you subscribe to a new issue of Interest Rate Securities such as corporate bonds, the company issuing the bonds effectively borrows money from you. The amount you lent will be returned to you at maturity. In comparison, when you subscribe to a new issue of shares, you become a part owner of the company. The company has no obligation to repay your investment.

When you buy or sell bonds or shares on ASX, the relationship as creditor or part owner of the company is simply transferred between you and the other investor.

Bondholders usually carry a lower risk than shareholders in a company and therefore may expect a lower return for a number of reasons:

- Bondholders have a prior claim on the company's assets relative to shareholders, making bonds a lower risk investment compared to shares in the same company.
- Your return on a bond is largely predictable if you hold it until maturity. It will usually include a fixed or floating rate of interest paid regularly until the bond is repaid at maturity (perpetual notes are an exception) plus any difference between the face value of the bond and the
- Shares have no fixed maturity and your return will fluctuate in line with the profitability of the company and other factors. It will include any dividends from the company plus any capital gain or loss when you later sell the shares.

Using Interest Rate Securities to diversify your portfolio

Diversifying your portfolio can help to minimise your risk and protect your returns over the longer term. Diversifying involves:

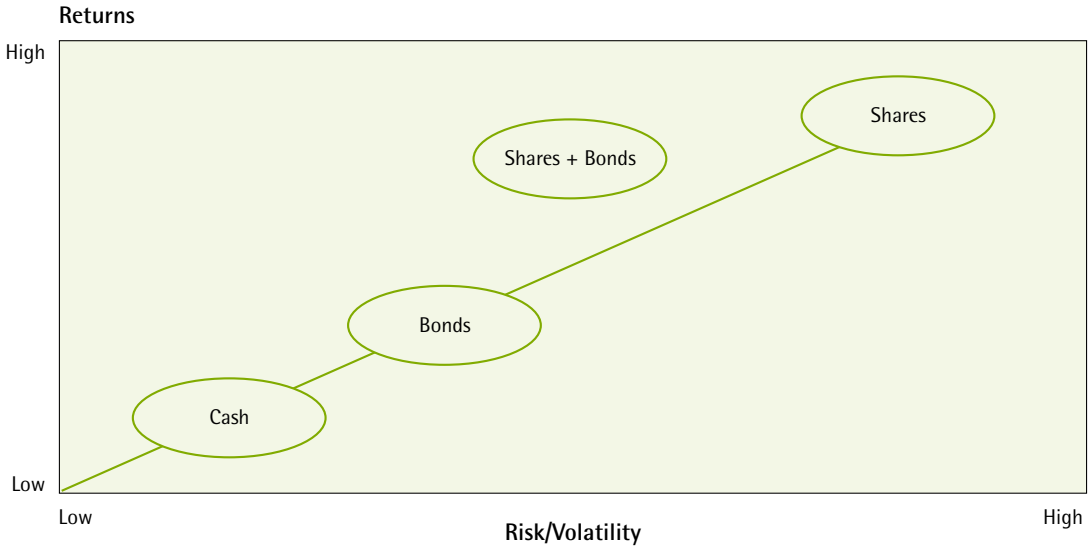
- Spreading your investments across a mix of assets such as Interest Rate Securities, shares, cash and property.
- Spreading your investments within each asset type.

The aim is to minimise the effects of shifts in market conditions. An investor whose entire portfolio is invested in one or two types of industries is subject to cycles in that industry, an example is an investor whose entire share portfolio was in technology companies would have felt somewhat vulnerable in April 2000 when the technology industry suffered a major downturn.

Just as it is generally suggested that a share portfolio be spread across industries, it is also usually wise for a bond portfolio to include a spread of issuers and maturity dates.

By combining different assets in a portfolio, it is possible to maximise your return relative to your risk. The following graph shows estimates of bond and share market returns, which demonstrate this theory of an optimal portfolio.

Risk versus Return



Risk and return - the trade off

It is important to understand the degree of risk associated with different types of investments. Generally speaking there is a trade off between the returns of different investments and the risks associated with those investments. The risk level of a portfolio can be decreased by spreading your money across several different types of investments or 'asset classes'.

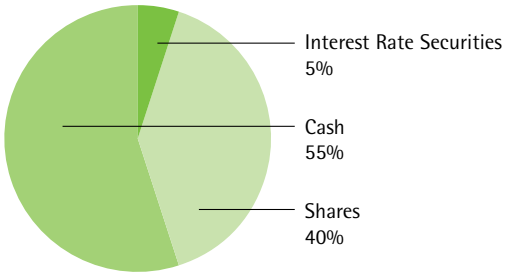
The above diagram is designed to illustrate how a portfolio that includes a balance of shares and interest rate securities can have significantly lower risk profile, but with only slightly lower returns.

The overseas experience

The following two pie graphs correlated from the most recent figures suggest that interest rate products are an under-utilised asset class for the average Australian investor. In comparison with US households, Australian households hold considerably more cash and less Interest Rate Securities.

Table 1

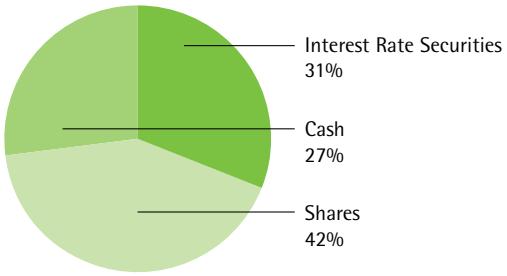
Australian households financial assets excluding superannuation (estimates)*



*Source: Australian Bureau of Statistics June 1999

Table 2

US households financial assets excluding superannuation (estimates)*



*Source: US Federal Reserve Statistics June 1999

Interest Rate Securities listed on ASX

Interest Rate Securities in Australia have traditionally been traded in the over-the-counter market by institutional investors. But ASX has now made it easier for these products to be traded on its exchange. Brokers can use their SEATS screens to buy and sell Interest Rate Securities and to compare the return offered with those of other products such as term deposits, finance company debentures and cash management accounts.

As a result, more companies are now listing their Interest Rate Securities on ASX in order to gain access to the retail investor market. Just as companies like Telstra sent out a prospectus outlining the opportunity to buy shares as part of its initial public share offering (IPO), companies seeking to raise funds by issuing Interest Rate Securities publish a prospectus outlining the offer to investors. Examples are the launch in December 2002 of Westpac FIRSTS or the Transurban CARS in April 2003.

To invest in the primary issue phase, investors typically first evaluate the issuer's offer in the prospectus and then subscribe through a broker for a number of securities. Once the securities are issued and listed on ASX, you can then buy and sell them on the exchange.

The ASX Interest Rate Market offers these key benefits:

1. **Transparency.** Ready access to information about the price, yield and other characteristics of different Interest Rate Securities helps you and your adviser make comparisons with other interest rate products and select securities with the return which best suits your chosen level of risk.
2. **Ease of entry and exit.** Interest Rate Securities are traded on SEATS and settled in CHESS so your adviser can easily place buy and sell orders for you and help you manage asset allocation for your overall portfolio.

Types of ASX Interest Rates Securities

Corporate Bonds	Bonds issued by companies that can be either secured or unsecured. They have a fixed maturity and coupon rate meaning that cashflows are known throughout the life of the bond and the face value is repaid at a fixed date in the future.
Floating Rate Notes (FRNs)	Bonds that can be either secured or unsecured. FRNs pay a variable coupon amount, generally quarterly or semi-annually, which is referenced to a short-term benchmark rate such as the 90-day bank bill rate. Many FRNs are perpetual and therefore you have to sell them to recoup your investment.
Convertible Notes	Pay a fixed coupon rate and can be converted into ordinary shares at a particular date or period of time in the future.
Hybrid Debt Securities	Securities that have both debt and equity characteristics including those Convertible Preference Shares that convert into a dollar amount of the ordinary shares of a company at a future date and at a set discount to the ordinary share price at that time.

3. **Liquidity.** The ASX Interest Rate Market gives you access to a broader range of potential buyers when you wish to sell, which creates price tension and potentially improves the price. Previously, investors often had to accept the price that was offered by the issuer to buy back the securities.
4. **Transferability.** Unlike other interest rate products such as term deposits and cash management accounts, ASX Interest Rate Securities are negotiable instruments. Just as you can buy and sell shares, you can trade Interest Rate Securities and the change in ownership is recorded automatically on a register in exactly the same manner as shares.

A list of Interest Rate Securities available for trading is provided on the ASX website at www.asx.com.au/irm or in a number of publications including the *Australian Financial Review* (a publication of John Fairfax Publications Pty Limited) or can be obtained from a stockbroker.

Characteristics of Interest Rate Securities

The three most defining characteristics of an Interest Rate Security are usually the amount of interest (coupon) you will receive over the life of the security (term to maturity) from the company (issuer) that borrowed the funds in the first place. The coupon payments and face value repaid at maturity are the two cashflows that determine the return on your investment.

However, like most investment markets, there are other characteristics and related jargon you should understand before you invest:

Call provision
Some Interest Rate Securities, notably perpetual securities, have a call provision attached. This gives the issuer the right, but not the obligation, to buy back the securities from you at a particular point in time at a certain price.

Convertible
A security that is convertible gives the holder the option to convert the security into ordinary shares at specified times (usually reset or maturity dates). If the holder decides not to convert there are generally two other choices: receive the face value back, or continue for a new set term. (These terms are set out in the prospectus to the issue)

Converting
A converting security does not give the holder a choice at maturity; the security must convert into the underlying shares at a specified date.

Coupon
A coupon is interest paid at regular intervals by the issuer to investors, normally expressed as a percentage per annum. Coupons can be fixed or floating, that is a fixed rate for the life of the security or a floating rate that varies in line with a benchmark rate, usually at a margin above the bank bill rate.

Coupon frequency
Coupon payments are made at regular intervals throughout the life of the Interest Rate Security and are usually quarterly, semi-annual or annual payments.

Creditor status
It must be understood that in the event of winding up a company the repayment of capital of a hybrid (if in the form of a convertible preference share) ranks ahead of ordinary shareholders but behind all creditors. Convertible preferene share holders do not have full shareholder voting rights. Convertible notes on the other hand generally rank above convertible preference shares.

Cumulative/Non-cumulative
This refers to what happens in the event of missed dividend or interest payments.

Cumulative: missed payments are added to the next payment.

Non-cumulative: missed payments are forgone.

Discount at Conversion date
This generally applies to hybrids that do not have fixed conversion terms. At conversion the allotment of ordinary shares (to the holder of the hybrid) is calculated on the current market share price. The holder of the hybrid usually receives a discount off the current market share price, (typically around 5%), therefore the allotted number of shares increases per hybrid.

Face Value
The issue price or underlying value of the security is usually $100. This is the base value used to calculate dividend or interest payments e.g. 8% return is not calculated on the market price of $102.50, it is calculated from the $100 face value, therefore you receive $8 p.a. per security.

Market price
The market price of an Interest Rate Security is stated as a percentage of its face value. For example, a price of $100 means 100 per cent of face value; a price of $99.90 is 99.9 per cent of face value; a price of $102.45 is 102.45 per cent of face value.

The market price includes two components:
1. **Capital amount** – the value of the security estimated by the market. It is based on a number of variables including current market interest rates relative to the coupon rate, time to maturity, ranking and credit quality. This value may remain stable from one day to the next, unless general 'market' interest rates move.
2. **Accrued interest** – the amount of interest accumulated on a security since the last coupon payment. A security price increases daily by the amount of interest accrued, for example, a security with a $100 face value and 6.5 per cent coupon rate accrues interest at $6.50 per annum or 1.78 cents per day. The price should adjust immediately after a coupon payment.

Maturity
Maturity is the date the agreement or contract between the issuer and investors holding the securities ends. On this date the final coupon and the face value is paid to investors. The time to maturity can vary greatly from short term (up to four years) to medium term (five to 10 years) or long term (10 or more years).

Convertible or hybrid securities are converted into shares in the issuing company on maturity rather than paying you the face value. Perpetual Interest Rate Securities have no maturity date but you can recoup your investment by selling them on the ASX.

Redeemable/Non-redeemable
Redeemable: at certain times the holder may have the option to hand the securities back to the company in return for the face value/issue price. Similarly, the issue terms may give the company the ability to redeem in certain circumstances.

Non-redeemable: The securities cannot be redeemed under any circumstances.

Reset/Resettable
A resettable security means that after a certain period (usually 3-5 years) the current terms and rates are reviewed i.e. a new interest or dividend rate is set over a new term and reset by the issuer. At this reset date the holder may have several options available to them but generally the holder can either accept the new terms, redeem or in relation to hybrid securities, convert into ordinary shares.

Returns
Like bonds convertible notes pay a coupon, i.e. interest. Convertible preference shares pay dividends in a similar way to coupons, i.e. a set return on set dates. This dividend is often franked and therefore offers possible tax advantage to the holder. Unlike ordinary shares the dividend on hybrids is known and predictable. The dividend rate may be fixed or floating.

Yield
The yield is the expected return on your investment. It can be described as:

- Nominal yield – the return based on the annual coupon payments as a percentage of the face value of the security. Also referred to as the coupon rate, it does not change throughout the life of the security.
- Current yield – the return based on the annual coupon payments as a percentage of the amount you paid for the security at any given price.
- Yield to maturity – the annualised total return based on all the coupon payments plus the face value you would receive if you held the security to maturity. It includes any gain or loss if your purchase price was below or above the face value. Therefore it is the most useful indicator of the value because it enables comparisons between different securities and other interest rate based products.

Example – Buying corporate bonds

On 23 October 2002, you settle and pay for 100 corporate bonds of a fixed-rate issue by Repco Limited of '10% April 2007 bonds' at a price of $103.50 with a yield of 9.10%.

Issuer	Repco Limited
Coupon	10%
Coupon Frequency	Quarterly: 15 April, 15 July, 15 October & 15 January
Maturity Date	15 April 2007
Face Value	$100
Purchase Price	$103.50
Yield to Maturity	9.10%

The 9.10% yield to maturity on your investment is based on the following:

Accrued interest and capital amount
You (settled) paid for the bonds on the date of 10 May 2001. This is 8 days after the last coupon was paid on the 15 October 2002 therefore there is accrued interest incorporated into the securities price.

The accrued interest amount is the coupon of $10 per $100 face value per year. This coupon accumulates per day for a calculation of $10 / 365 days = 2.74 cents per day.

Therefore the accrued interest (per $100) for 8 days is $0.0274 x 8 = $0.22

Leaving the capital amount of:
$103.50 - $0.22 = $103.28

The total investment amount is:
$103.50 x 100 = $10,350

Income stream
The coupon is 10 per cent p.a. The coupon is paid quarterly so you will receive a coupon 4 times a year
= (number of bonds x face value) x (coupon rate / coupon frequency)
= (100x $100) x (100% / 4)
= $250

Payment at maturity
The maturity date is 15 April 2007, at which point you will receive the face value of the bonds as well as the final coupon. Maturity payment:
= (100 x $100) + (100 x $100 x (10.00% / 4))
= $10,250.00

Yield
The nominal yield (coupon rate) of this bond is 10 per cent. The nominal yield will remain at 10 per cent throughout the life of this bond.

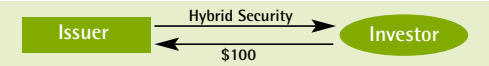
Given the above cashflows, the yield to maturity on the purchase price is 9.10 per cent. This yield will fluctuate during the life of a bond, reflecting the changing level of interest rates generally and other factors.

Hybrid Securities

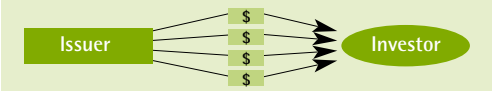
The term hybrid is given to a class of securities that have the characteristics of both an interest bearing security and equity i.e. both bonds and shares. This classification covers securities such as convertible notes and convertible preference shares. These securities pay a fixed return (like a bond) but also have an option to convert into equity (i.e. shares) of the issuing company.

This brochure explains how these hybrid securities behave and spells out the major features and terms that investors should understand.

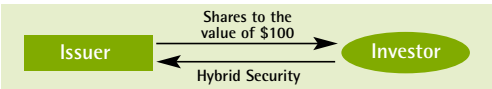
What do hybrid securities offer?



Investor buys the hybrid:
Issuer of the hybrid security pays the investor a known regular return (usually



every 6 months):
At maturity the investor gets the $100 back in



the form of shares (or cash in some instances):

Why would investors buy them?

- Regular income stream
- Security or lack of volatility
- Some have fully franked returns
- Discount on the share price when converting from the hybrid into shares

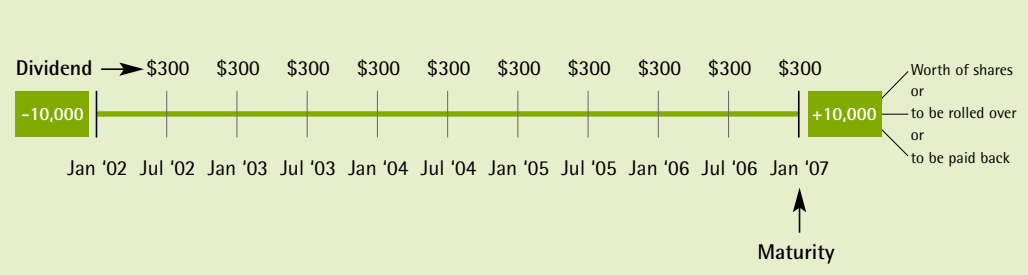
Why do companies issue them?

- Management of balance sheet
- Returns can be paid from retained earnings i.e. dividend

Hybrids - simple graphical explanation

As an example consider ABC Ltd which is a listed Company on the ASX. In January 2002 the Company issued hybrid securities - convertible preference share (expressed graphically below), which pays a semi annual, fully franked dividend of 6% p.a. for 5 years. If an investor invested $10,000 he or she would receive $600 p.a. ($300 every six months until the maturity date). At maturity, according to the terms set by the Company in the prospectus, the investor could choose to:

1. convert the $10,000 into ordinary shares (convertible); or
2. rollover or reset the investment (resettable); or
3. under certain circumstances, have capital in the form of cash returned (redeemable)



Coupon or Dividend

Hybrid securities returns

There is a decision to make when investing in a hybrid security based on returns. This decision is whether to invest in a security that pays interest or one that pays a fully franked dividend. One aspect to consider when making this decision is whether the investor can utilise the franking credits. There are two types of hybrid securities and they are:

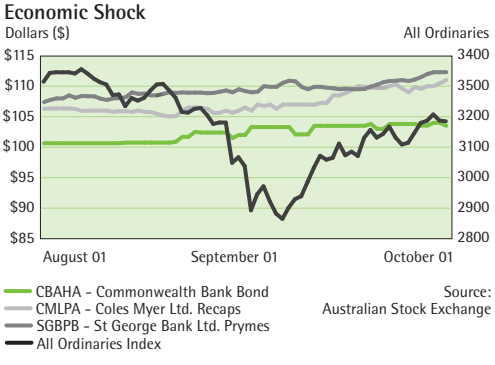
i) The convertible preference share paying a dividend from after tax profits and which is often fully franked; or
ii) The convertible note paying a coupon, which is regarded as interest and is an operating expense of the company.

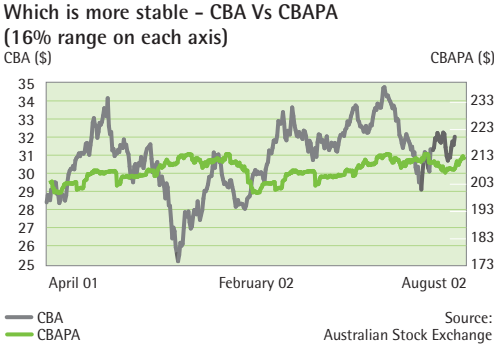
Another point to consider is the ranking of returns paid on these two securities by an issuer. Generally, the coupon on convertible notes is paid out before all dividends because it is an expense of the company (and therefore the securities are regarded as a debt obligation). The dividends on convertible preference shares are paid out of after tax profits and before the ordinary share dividends. It must be remembered that in practice companies who issue these securities only ensure, but not actually guarantee, that payments are made.

Hybrids structure

Economic shocks

Unfortunate and sometimes tragic world events affect the financial markets almost immediately, as the September 11th disaster demonstrated. Depending on their terms, hybrid securities and Interest Rate Securities as a class of investments, generally speaking, are not as effected by this sort of economic change as some other classes of investment (evidenced in the graphs below). It is this factor that shows why diversification across different classes of securities, i.e. equities, interest rate securities and property etc, is, in most cases, important to ensure your portfolio is not seriously effected by one single event.





The different conversion terms

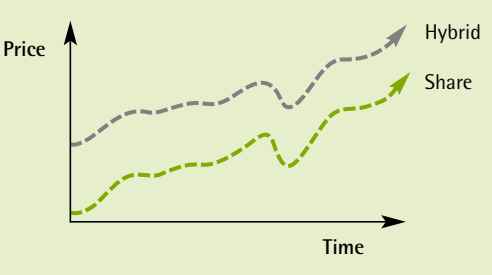
It is important to note that each issue of hybrid securities is structured differently and while the prices of some securities behave more like bonds, others behave more like the underlying shares that they convert into.

Basically there are two broad types of hybrids:

1. Fixed Conversion
2. Dollar Value Conversion

Fixed conversion

This is the original type of hybrid where the number of shares you are to receive is calculated and known at the issue date. The security usually reacts or behaves more like the underlying share than a bond.



Although each security with this type of conversion has individual characteristics, typically:

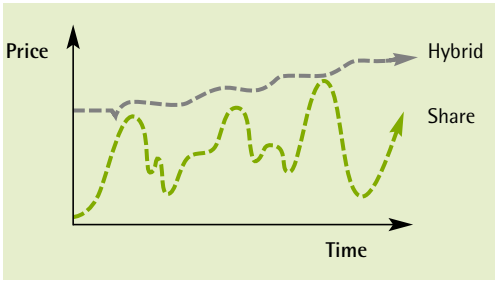
- They have a set rate of return until conversion
- The conversion might occur at one or a number of dates
- They are usually issued at a similar price to the underlying share
- They convert at a set ratio e.g. 1 hybrid converts into 1 underlying share

Note: This fixed conversion ratio means the price of these hybrids reacts to the movement in the underlying share price, depending on the conditions of conversion.

Dollar value conversion

This is the latest style of hybrid where the conversion (or number of shares you receive) is determined at the maturity date not at issue. The face value, usually $100, effectively buys you shares at the market price on the date of conversion, thereby reducing the correlation between share price and hybrid price. Therefore the characteristics of this type of security are very 'bond like'.

Hypothetical graphical example below:



Although each security with this type of conversion has individual characteristics, typically:

- They have a set dividend rate over a fixed period ('reset' period), which at the end of that period can be reset for a new dividend rate and new fixed period
- They are issued at $100
- The holder has the ability to take the new 'reset' terms, convert or, on rare occasions, redeem the face value
- The holder can convert into the shares at a discount to the current ordinary share price e.g. 5%
- The conversion ratio is into a dollar amount of shares e.g. $100 worth of the underlying equity

Note: This 'variable' conversion ratio means the price of these hybrids generally do not react to the movement in the share price and they therefore behave in a similar way to fixed interest securities i.e. a bond.

Correlation – conversion terms

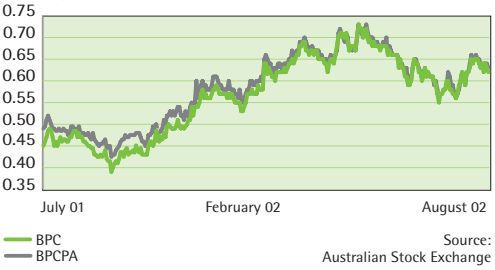
What is correlation? It is the measure of how closely the movement in the price of a hybrid security and the movement in the price of the underlying share mimic each other. Why is this important?

A highly correlated hybrid security will track or follow the price of the underlying share. If an investor didn't want to invest in a hybrid security that falls when the share price falls or vice versa, then a hybrid security that has a low correlation is more suitable.

This is where there is a need to look at the conversion terms again. Conversion into a fixed number of shares will mean there is generally a higher correlation between the hybrid security and the share price.

To highlight this lets look at an example. The hybrid security issued by Burns Philp & Company Ltd has fixed conversion terms of 1:1, 1 hybrid = 1 share.

BPC Vs BPCPA (Price Movement)

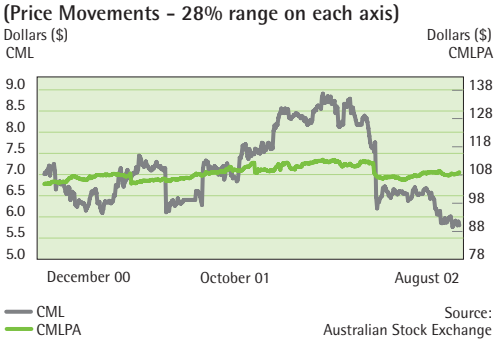


As the graph above indicates, BPCPA closely mirrored BPC's peaks and troughs.

What if an investor was looking for a hybrid security that is more stable? In this case a hybrid security with low correlation to the underlying share price is what the investor is after. An example of this is the dollar value conversion hybrid security. To highlight the difference lets look at the hybrid security issued by Coles Myer Limited.

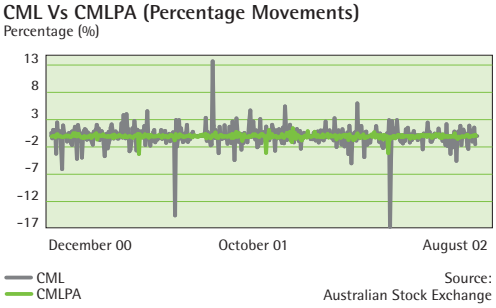
Hybrid Coles Myer Limited
CML Ordinary fully paid share
CMLPA Reset Convertible Preference Shares (ReCAPS)

CML Vs CMLPA
(Price Movements - 28% range on each axis)



The above graph does portray that CMLPA has a more stable price line than CML. However, the graph below highlights the correlation more effectively because it expresses the daily hybrid price movements and the daily share price as a percentage.

CML Vs CMLPA (Percentage Movements)



The above graphs highlight the steady nature of a hybrid with a dollar value conversion. As indicated by the graph above (Percentage Movements) the CMLPA is generally more stable than the CML price and although this type of hybrid cannot benefit from upward capital price movements as much as a fixed conversion hybrid, it can limit the down side.

How does conversion work?

How many shares are allocated when a hybrid security converts? That is easily answered if a security has a fixed conversion. The number of shares allocated is predetermined and stated in the prospectus. For example a hybrid security that converts 1:5 basis will deliver 5 ordinary shares for each hybrid security held.

The dollar value conversion styled hybrid securities on the other hand is a different story. One example is the John Fairfax Holdings Ltd hybrid security sometimes referred to as the Fairfax PRESSES (FXJPA). The prospectus for this hybrid security does not state exactly how many shares you will receive on conversion. Rather it states that the face value (issue price) of $100 is convertible into $100 worth of shares.

So the number of shares received is confirmed at the maturity or conversion date. Lets take the Fairfax PRESSES example a little further.

Firstly a price of the ordinary shares is needed to work out how many shares the $100 face value will buy. The conversion price is calculated by obtaining the share price weighted over the last 20 days of trading up to the conversion date, to get a fair figure. Then (as in most cases with hybrid securities) a discount is applied to the conversion price, 2.5 % in this case, effectively delivering more shares. Most dollar value conversion hybrid securities like the PRESSES have a set minimum & maximum number of shares that each hybrid will be swapped for. The PRESSES in this case have a set range of minimum 16.6771 FXJ shares or maximum of 1000 FXJ shares. The table below shows us the calculations.

The table shows how the number of securities allotted is calculated. The table also highlights how the minimum and maximum number of shares allowed can affect the value of the hybrid security. This is further expressed in the graph below:

Below the market price of $0.10 the maximum shares received are 1000 therefore the value of the hybrid security decreases. On the other side, above the price of $6.15 the minimum shares received is 16.6771 therefore increasing the value.

FXJPA Face Value	FXJ Price (20 day VWAP)	Discounted FXJ Price (2.5%)	How many shares would your Hybrid convert into?	No of shares allotted on conversion under terms in prospectus	Value of holdings after conversion at conversion price (C)	Value of holding after conversion at market price (B)
(A)	(B)	(C) = (B)–2.5%	(D) = (A)/(C)	(E)	(F) = (E)*(C)	(G) = (E)*(B)
$ 100	$ 0.0923	$ 0.0900	1,111.11	1,000	$ 90.00	$ 92.31
$ 100	$ 0.1026	$ 0.1000	1,000	1,000	$ 100.00	$ 102.56
$ 100	$ 3.5897	$ 3.5000	28.5714	28.5714	$ 100.00	$ 102.56
$ 100	$ 6.1500	$ 5.9962	16.6771	16.6771	$ 100.00	$ 102.56
$ 100	$ 6.6667	$ 6.5000	15.3846	16.6771	$ 108.40	$ 111.18

Resettable

Most of the recently issued hybrid securities are resettable. Resettable refers to the option the current hybrid security offers at maturity. The choices are to either convert into ordinary shares or roll over into a new set of terms offered by the issuer. As an example consider this hypothetical position:

Old Terms	
Swap rate	4.25%
Margin over swap	2.00%
Coupon/dividend	6.25%
Issued	6th Feb 1997
1st reset/conv date	6th Feb 2002
Term	5 years

Convert into ordinary shares

or

Reset for a new 5 year term

New Terms	
Swap rate	4.75%
Margin over swap	2.00%
Coupon/dividend	6.75%
Issued	6th Feb 2002
2nd reset/conv date	6th Feb 2007
Term	5 years

Valuation

Considering that each hybrid is constructed differently, comparing them is no easy task. There are many formulas and formats to measure value, two of the most popular are explained below.

Running Yield

Running yield is calculated as the dividend or returns divided by the purchase price. It is a simple measure of the return the holder can receive at current market prices, excluding any discount or optionality value.

Yield To Maturity (YTM)

One method of comparison is to use a common indicator of value like YTM. The YTM is the return you will receive if you buy the security today and hold it until maturity. The YTM takes into account all future coupon or dividend payments due to the holder, current price if purchased today and the face value returned to the holder at maturity. YTM enables comparisons to be made between hybrid securities but only on its bond content. To access a bond price and yield calculator, please go to the ASX website at www.asx.com.au/bondcalculator.htm

To get a true indication of value three additional aspects to be considered are: firstly the value of remaining dividend payments grossed up so they represent the extra value from franking credits; secondly, the added value of a discount available to the share price at conversion; and thirdly, the value of the options tied in to the conversion terms of the hybrid.

To find these indications of value on hybrids (or any interest rate security) contact your broker or financial adviser for advice or analysts' reports.

New Products – Credit Linked Notes

We are now beginning to see the emergence of another sophisticated product that resembles a high-interest paying security but also has a higher level of exposure to credit risk.

One of the simplest and most common forms of structured product on issue in Australia is the mortgage-backed security (MBS). Many of you would be aware of Aussie Home Loans or RAMS home loans and may even have a home loan with one of them. How a MBS is created is as follows:

- The mortgage for your house, say $500,000, is pooled with many other mortgages to a total amount e.g. $1 billion.
- This $1 billion worth of loans is then packaged up by a specialist company
- This specialist company creates a special purpose vehicle (usually a trust) into which all the mortgages are placed. The trust then issues interest paying securities which are sold to investors
- Investors have a beneficial interest in the mortgages via the Trust as security for their investment. The regular payments made by you and other mortgagees are then passed on to investors as interest and repayment on their investments.

Structured products like mortgage/asset-backed securities and others such as synthetic Collateralised Debt Obligations (CDOs) and now Credit-Linked Notes (CLNs) are not new to wholesale investors. However, retail investors were given the first taste of these structured products when $60 million of Nexus Yield Bonds, arranged by Deutsche Bank, were issued and listed on ASX in December 2002.

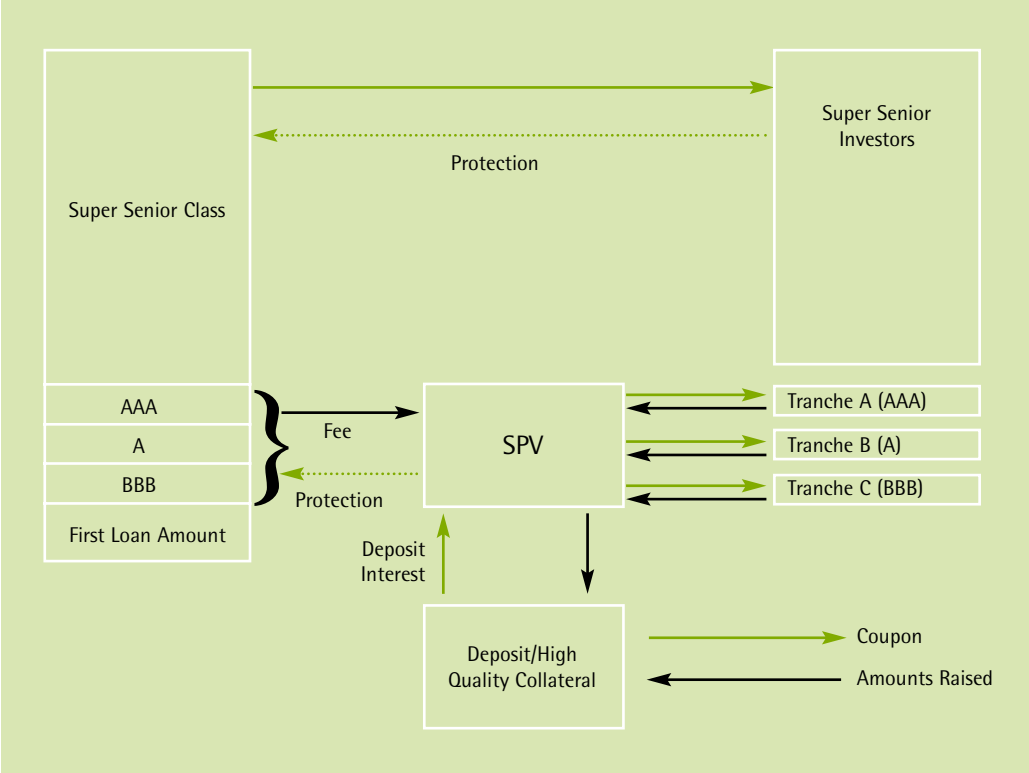
The CLN is put together by a specialist company or an arranger (usually an investment bank) and is similar in structure as a MBS. However as the name suggests, the performance of your CLN investment is linked to a credit portfolio:

- On one side you have a portfolio often consisting of senior unsecured loans to or bonds issued by a number of investment grade domestic or international corporations.
- The owner of this portfolio would like to decrease his credit risk exposure i.e. an adverse credit event such as missed coupon payments or defaults. What he wants is protection so he buys what is called a credit default swap to hedge his risk. A special purpose company sells the credit default swap to the portfolio owner.
- In return for taking over the portfolio's credit risk, the portfolio owner pays a fee to the company.
- The company must have cash at the ready to pay the portfolio owner in case there is a credit event. This cash comes from investors.
- The cash comes from the amount raised by the company selling securities that are backed by the credit default swap arrangement
- This cash is then invested into high quality assets or deposited with a bank and held as security for investors. So some of the fee from the credit default swaps and the interest paid on the deposit is then passed on to investors as interest on their investment.
- On the expiry of the credit default swap arrangement, and provided there have been no credit events the securities mature and the original investment is returned.

CLN issues are unique as they can be "structured" to meet the requirements of investors and their risk profile. As there are usually different series/tranches of notes issued from a CLN structure, it is possible to choose the level of risk and return you are willing to take by investing in tranches which have a higher or lower risk exposure in the credit default swap. Any losses to the Portfolio that may arise due to adverse credit events such as a company defaulting on payments, are passed on in sequence, depending on which level of risk you have chosen to take, In addition, the arranger of the CLN usually takes the first loss in the portfolio in order to align their interest with noteholders.

For instance, the arranger in the example below will take on the first loss in the portfolio after which any losses up to the notional amount issued are passed on to Tranche C noteholders. Tranche B holders will be next in line for any further losses, then Tranche A holders and so on. Investors prepared to bear the first losses are paid the highest return and those that take subsequent sets of losses are paid slightly less. Therefore, commensurate with the extra risk it carries, the yield offered on Tranche C should be higher than Tranche B. CLN issuances in future may specify a capital guarantee, in which case your investment will be returned at maturity, but the yield offered may be less to reflect the reduced risk.

Although it may seem complex, a CLN issue does bring the benefit of investing into a large highly diversified portfolio at higher investment grade tranches and returns, in addition to having your exposure to the senior debt of the companies in the portfolio sitting above equity investments in the companies' capital structure. However, all collateralised debt obligation securities transaction terms and structures vary from one to another. The example above should give you a basic understanding but make sure you carefully read the terms of each issue as disclosed in the prospectus. Make sure you understand and are comfortable with the portfolio of credit your investment return relies upon and the amount of risk you are taking on, as well as understanding the events that may affect your capital.



What to know before investing

The same relationship that generally holds true in other investment markets also applies to Interest Rate Securities: usually the greater the perceived risk, the higher the expected return required to compensate investors for that risk.

For example, you might be able to earn a 4% return on a term deposit. However, you might prefer to invest in a 10-year bond that, at the time of purchase, yields a 6.5% return. The yield is higher than the term deposit rate because you have to wait 10 years to get your investment back and in the meantime conditions may change or the issuer may default. Alternatively, you may sell the bond at the prevailing market price on ASX.

Over time, both the market interest rates, including term deposit rates, and the perceived risk may change, affecting the price of the bond if you do decide to sell it.

The effect of changing interest rates on yields and prices

When interest rates in general rise or fall, investors look for a correspondingly higher or lower yield from an Interest Rate Security.

If the coupon rate is floating, the yield on the security may stay in line with market interest rates without any significant impact on its price. However, if the coupon rate is fixed, the yield on the security can only keep pace with changing interest rates if the price of the security changes.

There is an inverse relationship between the capital price of a fixed-rate security and yield. A comparison can be made with what happens to the dividend yield on shares, that is, when the price of a share increases the dividend yield falls (assuming the dividend amount stays the same).

Interest rates*	Bond yields	Bond price (fixed-rate)
Rise	Rise	Fall
Fall	Fall	Rise

** In this context, interest rates should be understood as a broad term describing the general level of interest rates in the market.*

The table below shows the effect of different yields on the capital amount of one bond with a fixed 5 per cent coupon and of another bond with a fixed 8 per cent coupon.

Yield	5% fixed-rate bond Time to maturity			8% fixed-rate bond Time to maturity		
	2 years	4 years	10 years	2 years	4 years	10 years
4.00%	$101.904	$103.663	$108.176	$107.615	$114.651	$132.703
6.00%	$98.141	$96.490	$92.561	$103.717	$107.02	$114.877
8.00%	$94.555	$89.901	$79.615	$100.00	$100.00	$100.00

Other factors affecting the yield on Interest Rate Securities

In addition to the prevailing market interest rates, a range of factors can affect the yield that investors seek from any particular Interest Rate Security including the:

- Credit quality of the issuer.
- Ranking of the issue.
- Time to maturity.
- Coupon frequency.
- Liquidity or marketability.

Credit quality

An important element of risk in Interest Rate Securities is potential default by the issuer. Generally the higher the credit quality of the issuer, the lower the risk associated with the security and therefore the lower the yield required by investors.

The three most prominent credit-rating agencies are Fitch, Moody's Investors Service and Standard & Poor's. The scales they use to rate the credit worthiness of issuers are shown in the table below.

An issuer's credit rating can change over time. Any change in the rating will have a direct impact on the market price of its securities. If a company is unrated, it does not necessarily mean that its securities are high risk, but it does mean that you may want to turn to other means to evaluate its financial strength. Your broker may be able to help by providing company research data.

Ranking

Ranking or status refers to the order in which liabilities will be paid should the issuer be wound up. Generally the higher the ranking of a security, the safer the investment, and so the lower its yield.

The various ranks used include:

- Secured – a security backed by a charge over an asset of the borrower.
- Unsecured – a security that is not backed by an asset or charge over an asset.
- Senior – a security that ranks ahead of other debt and equity.
- Subordinated – a security that ranks behind other debt but ahead of equity.

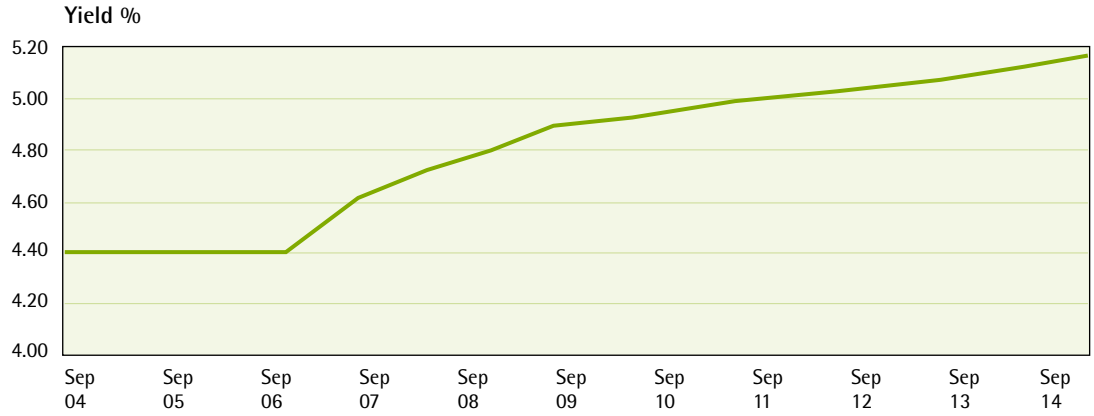
Time to maturity

The longer you are required to hold an Interest Rate Security, the greater your exposure to the risk that market conditions or the issuer's credit rating might change and you should expect to receive a higher return as compensation for that additional risk.

The relationship between yield and maturity is represented by what is known as a yield curve. Yield curves reflect investors' view of the value of Interest Rate Securities of various maturities.

Fitch	Moody's	Standard & Poor's	What the Rating Means
Investment Grade			
AAA	Aaa	AAA	Highest credit quality
AA	Aa	AA	Very high credit quality
A	A	A	High credit quality
BBB	Baa	BBB	Good credit quality
Non-investment Grade			
BB	Ba	BB	Speculative
B	B	B	Highly Speculative
CCC	Caa	CCC	High Default Risk
CC	Ca	CC	High Default Risk
C	C	C	High Default Risk
DDD	C	D	Default
DD	C	D	Default
D	C	D	Default

Australian Commonwealth Government Bond yield curve – July 2003
Source: Grange Securities Limited



Coupon frequency
The frequency of coupon payments is a key factor in the overall return of your investment.

An annual coupon rate of 5.65% actually provides the same return as a semi-annual coupon rate of 5.57%. The interest rate is a little lower for the semi-annual coupon but you get half of the interest sooner.

Liquidity or marketability
Liquidity refers to the ease with which a security can be readily and with minimal loss converted into cash. The characteristics of the security itself, including time to maturity, coupon rate and credit rating of the issuer, as well as the scarcity or abundance of substitute investments can all affect the level of demand for it in the market.

The ability to trade an Interest Rate Security on the ASX market usually reduces the costs of transacting while at the same time giving you access to a broader range of potential buyers.

Factors that influence general interest rates and yields
While you don't need to be an economist to invest in Interest Rate Securities, it is generally important that you understand the key economic factors that influence interest rates and, in particular, how the Reserve Bank of Australia decides to set official interest rates.

Inflation
Expectations about inflation are a powerful influence on interest rates as inflation affects the purchasing power of money and therefore the value of any investment assets. As the inflation rate (specifically, the expected inflation rate) rises, interest rates become under pressure to rise in order to maintain the value of assets in the economy.

Gross domestic product (GDP)
GDP is a measure of the goods and services produced in an economy and whether that economy is growing or stagnant. Because the cost of supplying those goods and services is affected by shifts in interest rates, interest rates also can affect GDP.

Balance of payments (BOP)
BOP provides a record of Australia's economic transactions with the rest of the world. Generally a positive or improved balance of payments would reduce pressure on interest rates to increase. Conversely, a negative or deteriorating balance of payments normally intensifies pressure on interest rates to increase.

Borrowing and lending in Australia
Interest rates assist in achieving a balance between the total amount of borrowing and lending that occurs in Australia and therefore the level of overall economic activity. When the demand for borrowing exceeds plans to lend, interest rates will tend to rise and when the demand for borrowings fall short of plans to lend, then interest rates tend to fall.

International economics

Australian interest rates are influenced by a number of international factors including:

- World growth – high levels of activity in the major world economies can result in strong manufacturing demand for commodities. The resulting higher commodity prices can improve our BOP and therefore generally ease the pressure on interest rates.
- Overseas interest rates – Australia has consistently run a BOP deficit, forcing it to borrow funds overseas. Therefore Australia may attempt to offer interest rates that are attractive relative to overseas rates in order to attract offshore investment funds to Australia. This means that, generally, if overseas interest rates rise then domestic interest rates also tend to rise.
- Currency movements – the prices of Australian exports and imports are affected by the value of the Australian dollar (AUD) against the currencies of our trading partners and competitors. A strong AUD may result in our exports being more expensive, while at the same time reducing the cost of imported goods. This can have a negative effect on Australia's BOP and may put upward pressure on interest rates.

The Reserve Bank of Australia (RBA) meets monthly to consider amongst other things the above factors. The RBA Board sets the rate of interest that the RBA is prepared to pay the Australian banks for call deposits. This sets the 'Base Rate' for all other rates (including Interest Rate Securities coupon rates) that are benchmarked against it.

ASX codes and price information

Interest Rate Securities that trade on ASX are quoted and traded on the Stock Exchange Automated Trading System (SEATS). Each security is identified by an ASX code that is four to five alpha-characters long.

The first three characters identify the issuer, for example, CBA for Commonwealth Bank of Australia.

The fourth character identifies the type of security. For example:
- H indicates an unsecured note
- G indicates a convertible note
- P indicates a preference share

The fifth character, if any, is known as the sequence code. It indicates the number of that particular security within a series of securities on issue by the company. For example, CBAHA indicates the first unsecured note on issue by CBA or SGBPB indicates the second preference share on issue by St George Bank.

Current price information

You can get information about current trading prices through a number of channels:
- A broker should be able to provide the current market price for any securities.
- Price information is available at the ASX website at **www.asx.com.au**.
- The financial press carries a comprehensive list of the previous day's closing prices.

Bid and offer price

The bid price is the price a buyer is willing to pay for a security. The offer price is the price a seller is willing to accept for a security. The bid price is usually lower than the offer price, so the bid yield is generally higher than the offer yield.

Other considerations

Minimum investment

Some securities require you to make a minimum investment at the time of initial listing. You should check the prospectus or ask your broker to determine if this is so.

Settlement

Settlement of ASX Interest Rate Securities takes place in CHESS (Clearing House Electronic Sub-registry System) in the same way as shares are settled. As with shares you may hold your Interest Rate Securities in CHESS either as broker sponsored holdings or on the issuer's register as issuer sponsored holdings.

CHESS settlements normally occur on a trade day plus three (T+3) basis and the quoted prices for Interest Rate Securities reflect this. However, by mutual agreement, settlement can be scheduled from T+1 onwards.

Where to from here?

This booklet has covered the major issues involved in understanding Interest Rate Securities. The following exercise will help you decide whether investing in Interest Rate Securities is right for you. You will be able to use this information when contacting a financial advisor to include Interest Rate Securities in your investment portfolio.

Firstly, let's look at how a diversified portfolio can benefit you.

The importance of diversity

Interest Rate Securities provide an excellent way of diversifying your portfolio. However, many Australians have not yet taken advantage of Interest Rate Securities. Consider your current asset allocation percentages:

Shares %
Property %
Interest Rate Securities %
Cash %
Other Investments %

Managed funds and US shareholders, who are both more familiar with Interest Rate Securities, make greater use of them. The two pie charts on page 4 show the differences between typical Australian and US retail investors in asset allocation.

Notice that over 30% of total investments for US investors are in Interest Rate Securities.

In Australia, fund managers typically hold around 20% of their balanced portfolio in Interest Rate Securities. You can see that both of these are considerably greater than the typical 5% of Australian retail investors.

One of the reasons for the use of Interest Rate Securities is that they help offset risk. The graph on page 4 illustrates the changes in risk according to the relative allocation between Interest Rate Securities and shares.

Given the information above, and considering your existing asset allocation, what do you think would be an appropriate new asset allocation for you circumstances?

Shares %
Property %
Interest Rate Securities %
Cash %
Other Investments %

Steps to investing in Interest Rate Securities

Having considered the importance of diversifying your assets, and the role that Interest Rate Securities can play in providing diversity, the following section provides a step-by-step guide to purchasing Interest Rate Securities.

Step 1: Check your understanding

To begin with, consider those areas of knowledge which you understand, or still need more information about:

1. I understand how Interest Rate Securities can help diversify my investment portfolio. ☐ Yes ☐ In part ☐ No
2. I understand that differences in coupon frequency affect coupon value (that is, the interest rate). ☐ Yes ☐ In part ☐ No
3. I understand that different Interest Rate Securities have different risks, and that these risks are monitored by rating agencies. ☐ Yes ☐ In part ☐ No
4. I understand how the value of Interest Rate Securities may go up and down with changing interest rates. ☐ Yes ☐ In part ☐ No
5. I understand that to compare different Interest Rate Securities, a key measure to consider is the 'yield to maturity'. ☐ Yes ☐ In part ☐ No
6. I understand the differences between the various types of Interest Rate Securities listed on the ASX. ☐ Yes ☐ In part ☐ No

For those areas you are unsure about, we recommend you review this booklet further, or talk further with a financial adviser. You should consult a licensed financial advisor before making any investment decision. Remember, lack of knowledge is one of the key barriers that stops people from taking advantage of Interest Rate Securities.

Step 2: Prepare to speak to your financial advisor

Before speaking to your financial advisor about purchasing Interest Rate Securities, you may wish to consider the questions you want to ask. What sort of products do you wish to buy? Do you only want low risk securities, or are you interested in a range of products? What kind of spread of maturity dates would suit your needs? Are you interested in any Interest Rate Securities which may be convertible into shares at a later date?

You can add some of your questions below. Don't worry if you don't have all the answers to start with – your broker or financial adviser is there to help you!

Step 3: Determine the funds you have to invest in Interest Rate Securities

Based on the asset allocation percentage you developed for Interest Rate Securities above, and considering your total investment portfolio value, how much will you now allocate to purchase Interest Rate Securities? $

Step 4: Call your financial advisor and purchase some Interest Rate Securities

With all the information prepared here, speak to your financial adviser about the possibility of including Interest Rate Securities in your investment portfolio.

Q1

Q2

Q3

Glossary of terms

accrued interest
The amount of interest that has been accumulated from the last coupon date to the date when a bond is bought or sold.

capital price
Gross price less accrued interest.

corporate bonds
Bonds issued by a company.

convertible notes
A type of coupon-paying debt security that converts to the issuer's ordinary shares (equity) at maturity.

convertible preference shares
A type of dividend-paying preference share that converts to the issuer's shares (equity) at maturity.

debenture
A type of fixed interest security issued by companies. It is usually backed by a specific or floating charge over the issuer's assets.

default
When an issuer cannot meet the payment obligations.

discount price
When the capital price of a bond is less than its face value.

exchange traded
A security traded on an exchange.

government bonds
Bonds issued by a government.

gross price
The price an investor pays to buy bonds is made up of capital price plus accrued interest.

hybrid debt securities
A term or classification encompassing securities that have both debt and equity characteristics.

maturity date
The date on which a bond matures.

over the counter
A security that is not traded on an exchange such as ASX but transacted over the phone between professional investors and brokers.

par
A bond at par is one whose capital price is the same as its face value.

premium price
When a bond's capital price exceeds its face value. Face value is normally $100.

SEATS®
(Stock Exchange Automated Trading System) the computer system used for trading shares and Interest Rate Securities listed on ASX.

semi-government bonds
Bonds issued by a state owned government authority.

time to maturity
The number of days until a bond matures

yield curve
Graph showing the relationship between yield to maturity and time to maturity

Exchange Centre, 20 Bridge Street, Sydney NSW 2000, Telephone: 1300 300 279, Internet: www.asx.com.au