

# Exchange Traded Bonds and Sukuk ("ETBS")

## Advanced Tutorial

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## Content

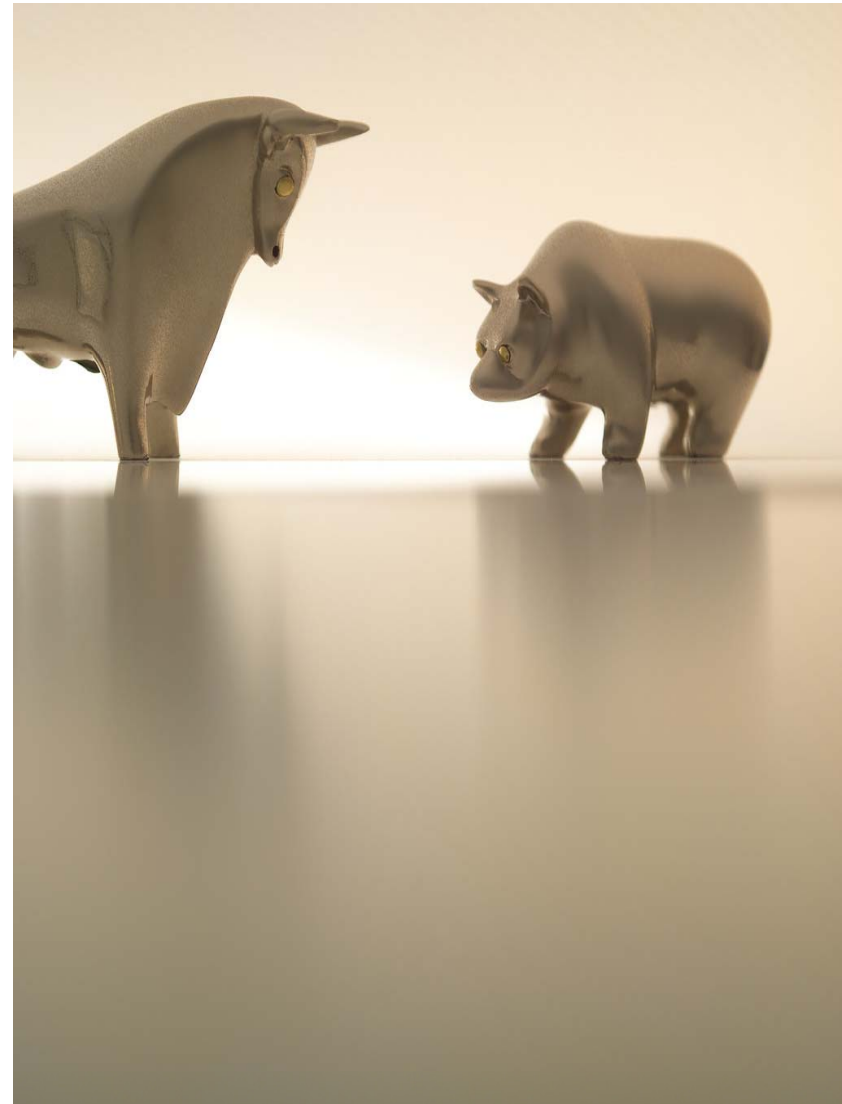
Chapter 1 – What is an Exchange Traded Bonds and Sukuk (ETBS)?

Chapter 2 – What are the types of Fixed Income Securities ?

Chapter 3 – What are the expected returns from ETBS?

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# Chapter 1 – What is an Exchange Traded Bonds and Sukuk (ETBS)?

- What is a Bond?
- What is the difference between Bonds and Shares?
- What is Sukuk?
- What is the difference between Bonds and Sukuk?
- Why issue Bonds and Sukuk?
- Who are the Issuers?
- Government Bonds
- Corporate Bonds
- What is an Exchange Traded Bond and Sukuk (ETBS)?
- What is the difference between ETBS and OTC

# What is a Bond?

- A bond is a type of fixed income security that companies or government also known as the issuer, issues to investors to meet their financial needs.
- It is also known as a debt security, as the investor or bondholder essentially buys the debt of the issuer. In this instance, the bondholder can be treated like a lender to the issuer and the agreement of the borrowing, is the bond, just like the bank when you take a loan. The amount loaned is called the principal amount.
- The bondholder will generally receive an interest on the principal amount, this amount is called the coupon payment and it is generally expressed as a percentage of the principal value.

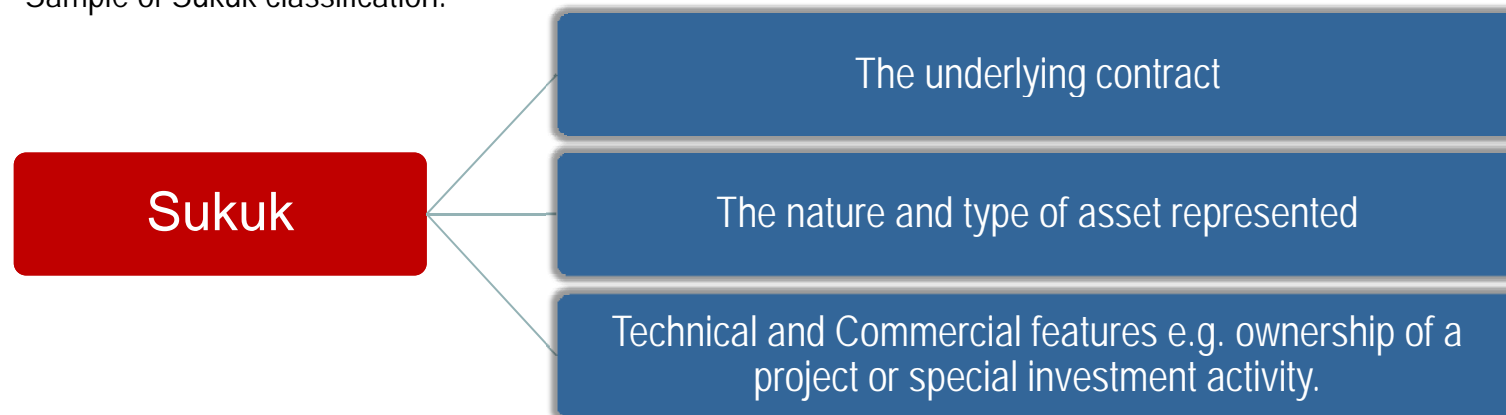


# What is the difference between Bonds and Shares?

Bonds	Shares
Bond is Fixed Income Security	Shares is an Equity Security
Bondholder an owner of a bond asset and do not have rights to the ownership of the company	Shareholder - an owner of the company
Steady flow of payments known as coupon	Dividend payments based on the policy and performance of the company
Generally less volatile	Impacted by market volatility and forces
Time limit or maturity period	Do not have a maturity period

# What is Sukuk?

- Sukuk (plural of Sak) is an Arabic word which means 'certificate'.
- When we talk about sukuk we refer to certificates issued under shariah principle or Islamic principle.
- Sukuk are also used to raise capital, however the issuer would issue a promissory note / letter of undertaking (LOU) with assets backing the promissory note unlike a bond issuance. When dealing with sukuk the returns on the certificates are referred as **dividend payments** instead of coupon payments.
- Sample of Sukuk classification:



# What is the difference between Bonds and Sukuk?

Bonds	Sukuk
Bonds are known as debt securities or obligation from the issuer	Sukuk are referred to as certificates.
Bondholder are the owner of a bond asset and do not have rights to the ownership of the company	Sukukholder, may have ownership depending on how the sukuk is classified e.g. part ownership of a project etc, or well defined assets.
Bonds are issued to finance almost any purpose under its legal framework	Sukuk issuance must be Islamically permissible in the nature and its use, for instance the asset backing the sukuk must follow Islamic principals.
The bonds are dependent solely on the creditworthiness of an issuer	The Sukuk's value is determined by the market value of the underlying asset backing the instrument.
Steady flow of payments known as coupon	Steady flow of payments known as dividends

# Why issue bonds and sukuk?

Here are some examples of the reasons why companies, governments and institutions would issue a Bond.



Governments borrow money to build infrastructure, finance projects and initiatives.

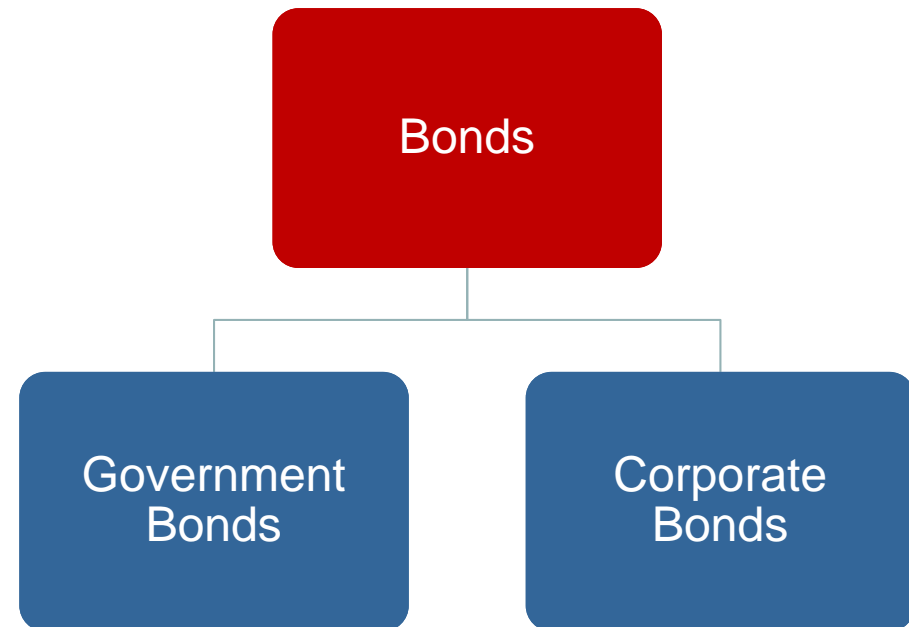


Companies may borrow money for equipments and operations needs to maintain and grow the business.



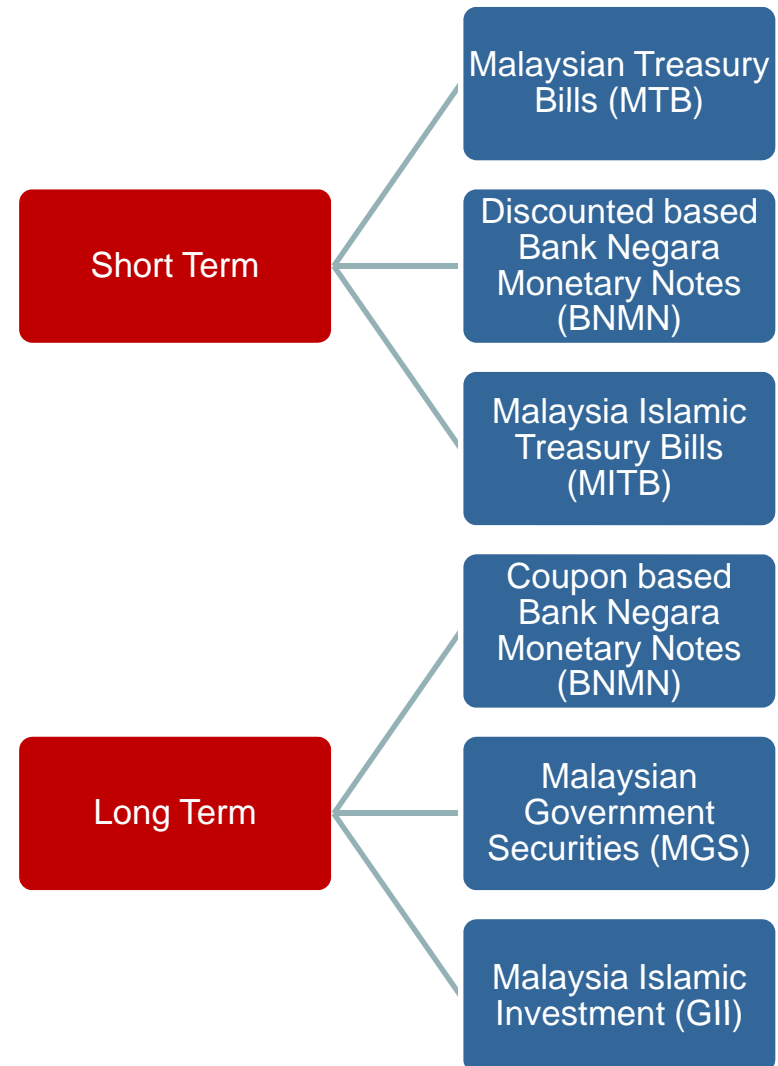
# Who are the Issuers?

- There are two types of issuers of bond:
  - 1) Governments
  - 2) Corporations
- As the name suggest corporate issuer issues corporate bonds such as private debt securities (PDS), whilst government institutions issue government bonds.



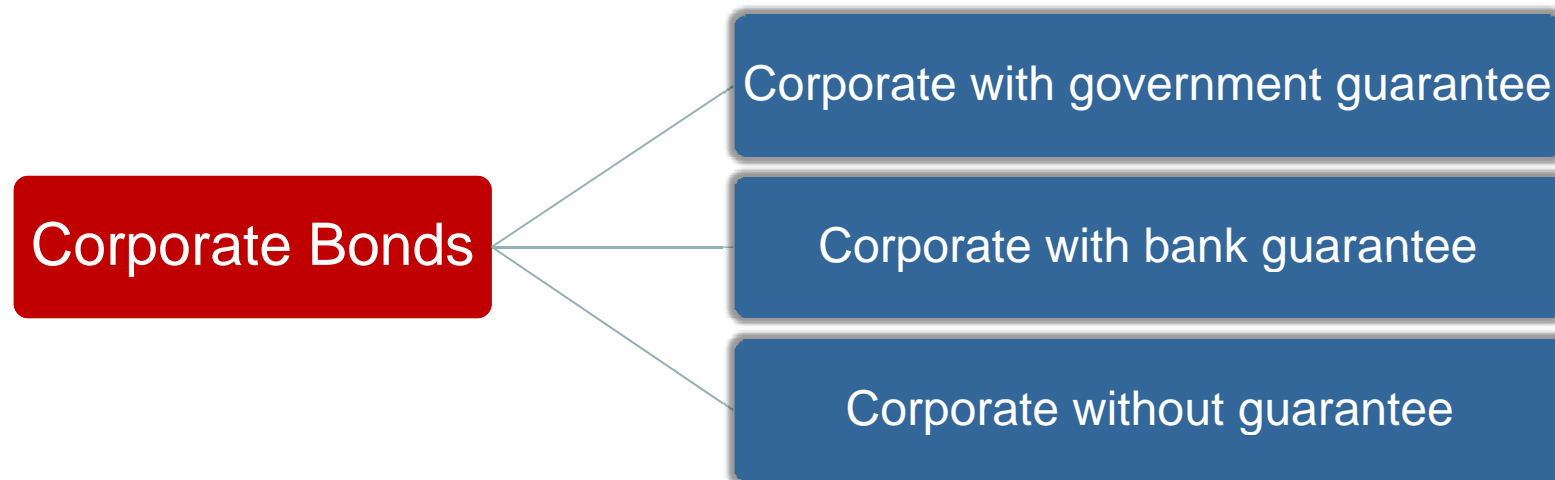
# Government Bonds

- Government Bonds are bonds issued by the government and it is backed or guaranteed by the government. Government bonds do not have rating.
- Government Bonds can be categorized by the term of the bond's maturity, either short term or long term. In Malaysia we have the following breakdown.
- **Short Term** periods are:  
: Weekly, 3 mths, 6mths, 1 year
- **Long Term** period are:  
: 3 – 30 years



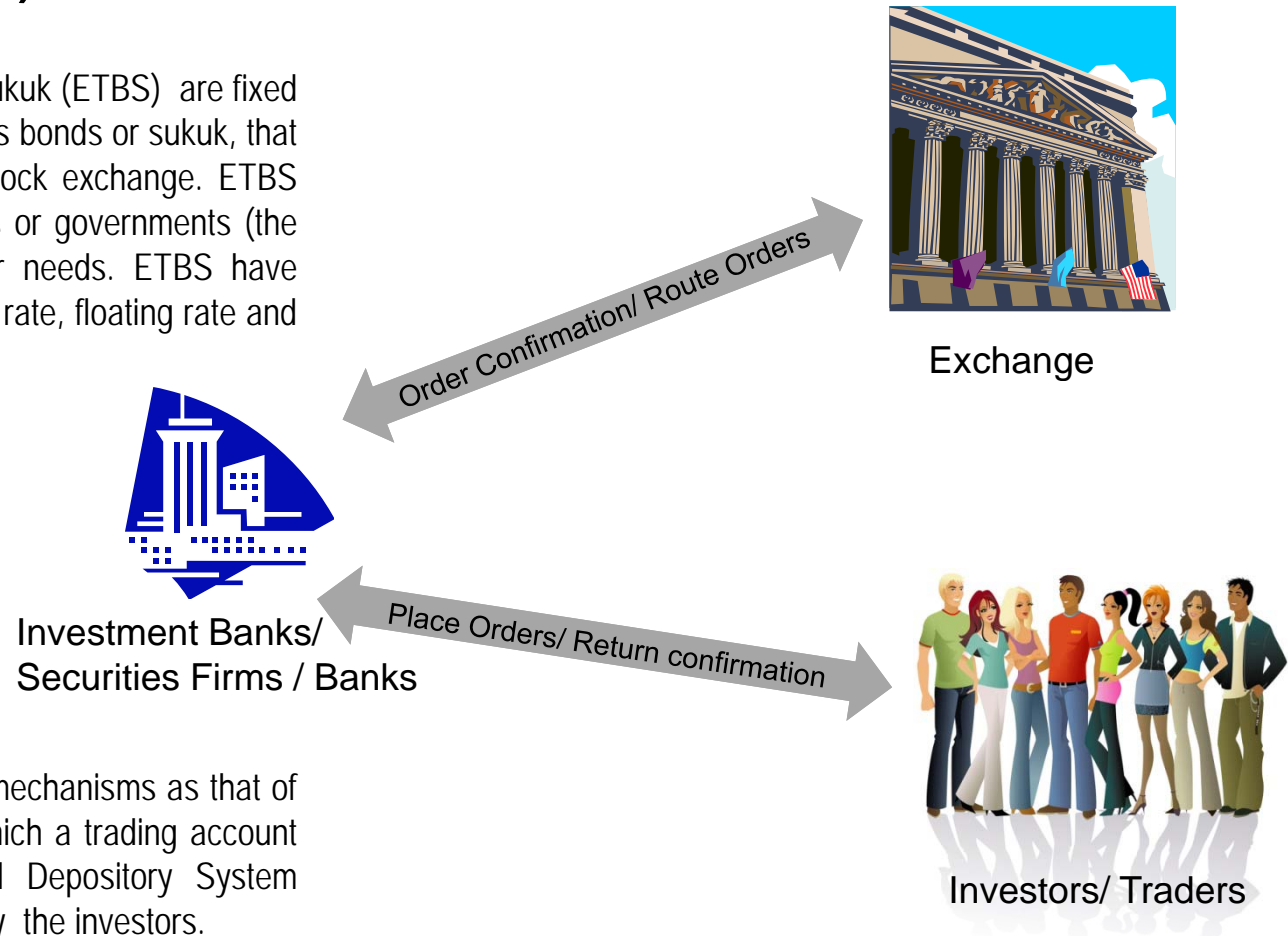
# Corporate Bonds

- Corporate Bonds can be further broken into the following depending on the guarantee and thus the risk of the credit being offered.



# What is an Exchange Traded Bonds and Sukuk (ETBS)?

- Exchange Traded Bonds and Sukuk (ETBS) are fixed income securities, also known as bonds or sukuk, that are listed and traded on the stock exchange. ETBS are issued either by companies or governments (the issuer) to raise funds for their needs. ETBS have varying structures such as fixed rate, floating rate and hybrids.



- ETBS will still utilize the same mechanisms as that of buying and selling shares in which a trading account (with the broker) and Central Depository System (CDS) account will be needed by the investors.

# What is the difference between ETBS and OTC?

ETBS	Over The Counter (OTC)
Subscription of ETBS through issuing houses, or banks/brokers for the primary market	Subscription through banks for the primary market
ETBS are traded over the Exchange after listing via investors / traders trading account in the secondary market	Traded over the counter via the banks after initial issuance.
ETBS prices are quoted on the exchange	Investors need to contact relevant banks for prices of bonds and sukuk
Minimum trading size is 10 units , typically with an IPO price of RM100 and thus minimum price of RM1000.00 (dependent on the minimum set by the issuer)	To buys and sell bonds or sukuk through OTC will dependent on the terms set by the banks

## Chapter 2 – What are the types of Fixed Income Securities?

- What are the various type of Fixed Income Securities?
- What are Fixed Rate Bonds?
- How do Fixed Rate Bonds behave in market?
- What are Floating Rate Bonds?
- How do Floating Rate Bonds behave in the market?
- What is the difference between Fixed and Floating Rate Bonds?
- What are Zero Coupon Bonds?
- What are Hybrid Bonds?

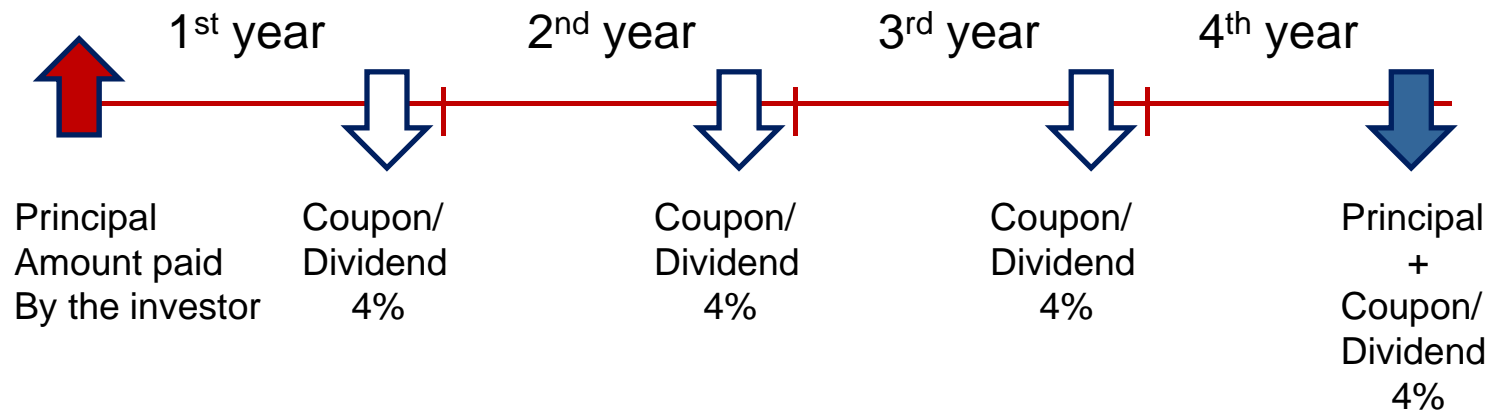
# What are the various type of Fixed Income Securities ?

Fixed Income Securities can come in many forms, however below is a list of the most common types of fixed income securities:

- Fixed Rate Bonds
- Floating Rate Bonds
- Zero Coupon Bonds
- Hybrids Bonds

# What are Fixed Rate Bonds?

- These are “plain vanilla” bonds with a specified coupon rate and maturity, and no options attached.
- Coupon dates can be semi-annual or annual. The vast majority of bond offerings in Malaysia are straight fixed-rate issuances.
- Below illustrates a typical annual fixed rate bond with 4% coupon payment and a maturity of 4 years. The dates of the coupon payments are fixed and the coupon payment dates are known at the point of issuance.

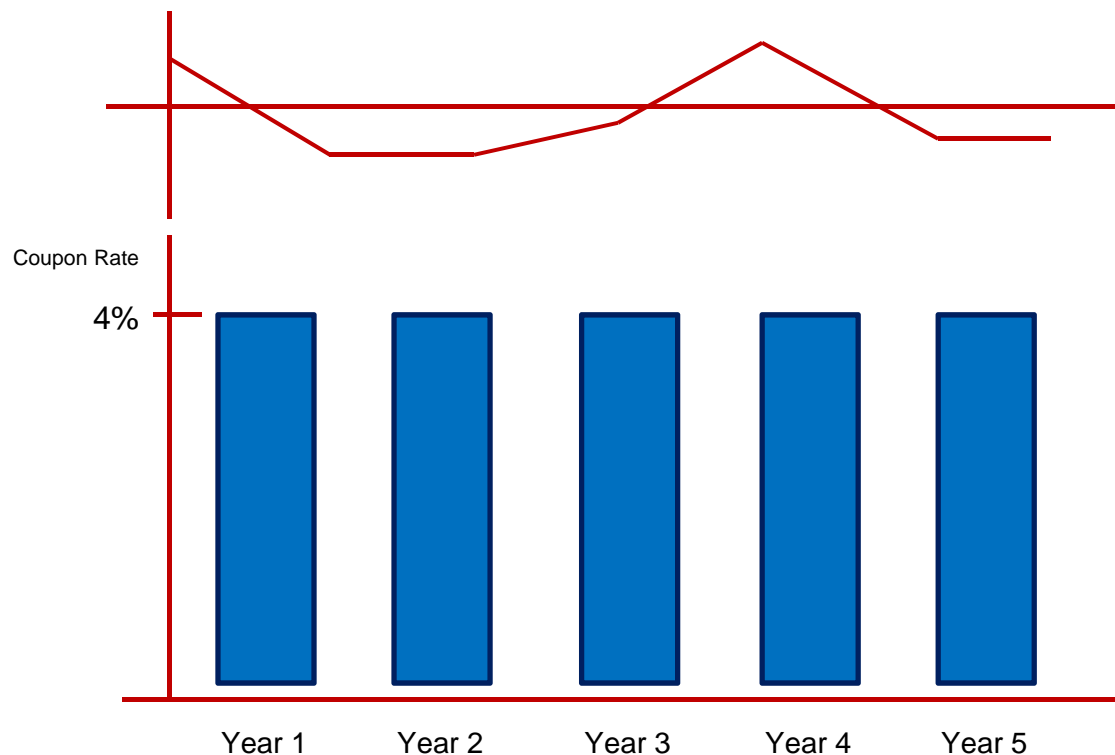




# How do Fixed Rate Bonds behave in market?

- Fixed rate bonds coupon payments are fixed and so is the amount of interest earned based on the principal amount investment, regardless of the market interest rate. In the case below, the bond has given a coupon payment of 4% for the past 5 years. Note that the change in the market Interest Rate has no effect on the coupon rate.

Change in Market Interest

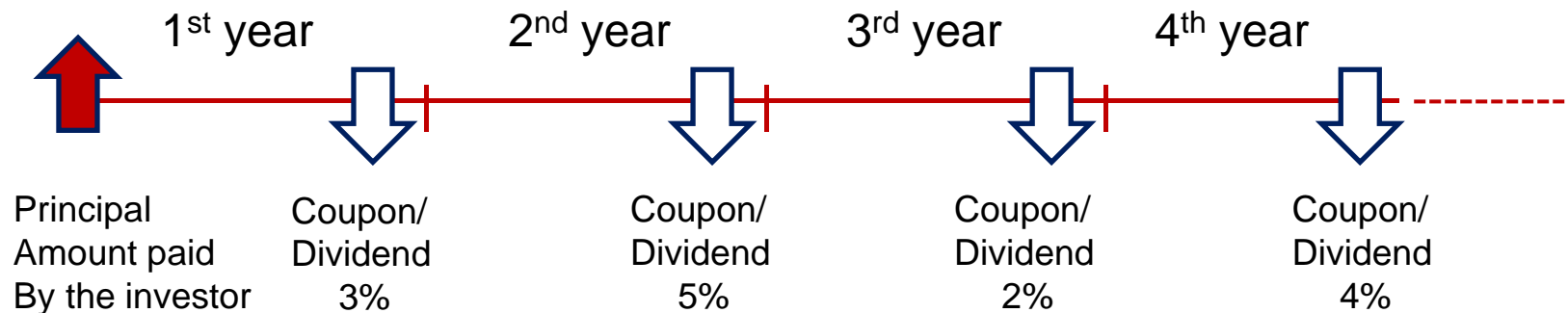


# What are Floating Rate Bonds?

- As the name suggests floating rate bonds or variable rate bonds are bond that have a variable coupon rate and are indexed to a reference rate. In Malaysia this will be based on the 3-month and 6-month KLIBOR (*The Kuala Lumpur Interbank Offered Rate*).
- Based on the term of the coupon payments the rate of the coupon is reset to reflect the current KLIBOR rate. These bonds are typically medium term bonds .

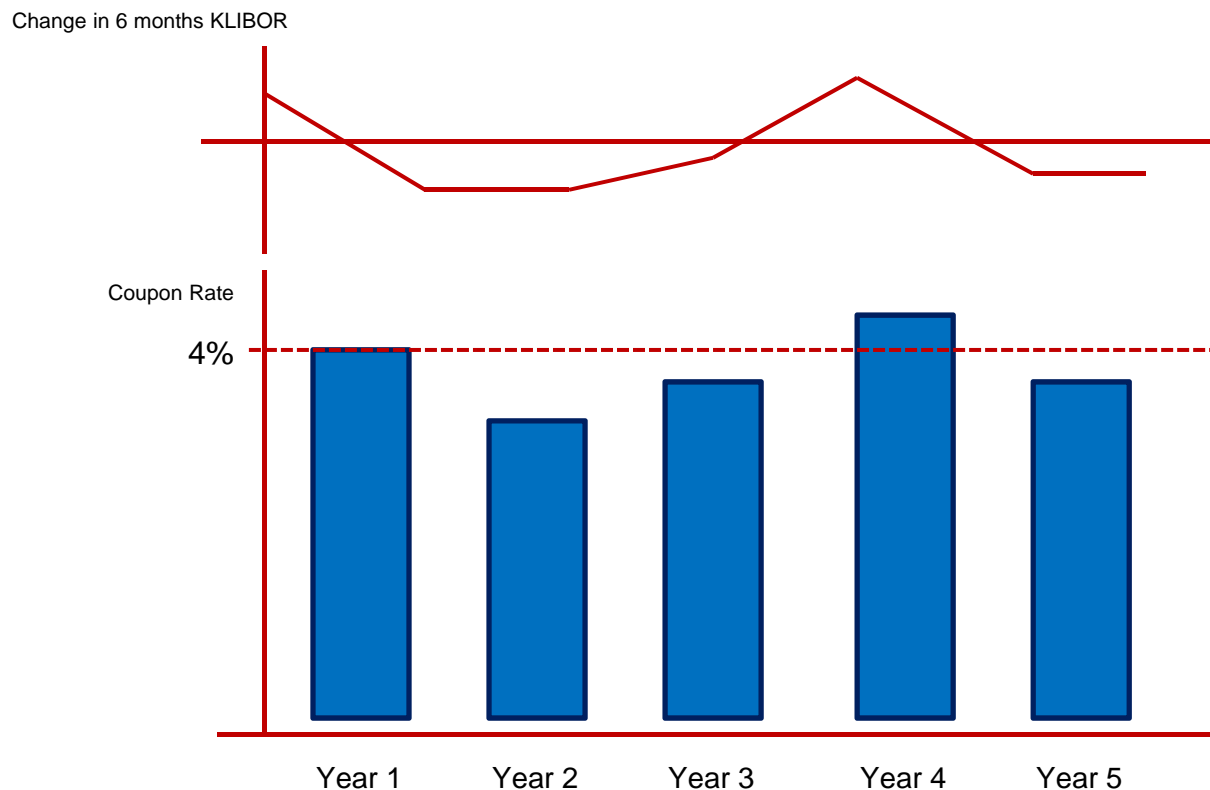
$$\text{Coupon Payment (6mo.)} = 0.5 \times (\text{KLIBOR} + X)$$

*X = default risk premium(%); KLIBOR resets.*



# How do Floating Rate Bonds behave in market?

- Bellow illustrates the effect of the KLIBOR Rate on the coupon payments of a variable rate bond. Note the coupon rate is reset based on the type of reference index used, which could be daily, weekly, monthly etc. See the respective bond prospectus for these details.

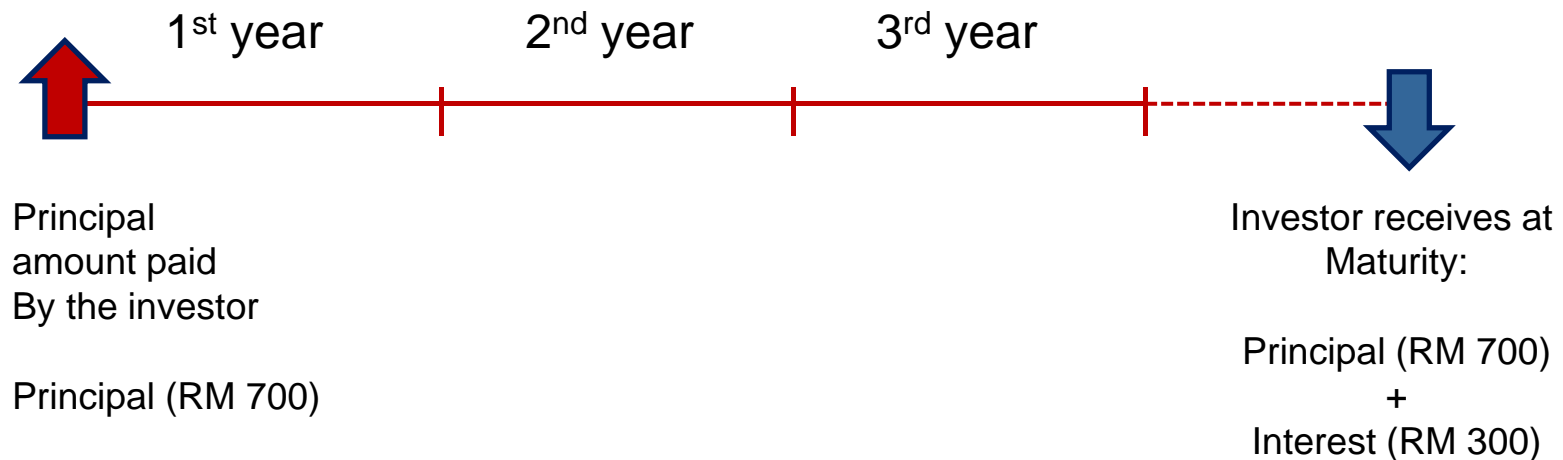


# What is the difference between Fixed and Floating Rate Bonds?

Fixed Rate Bonds	Floating Rate Bonds
Fixed coupon rate.	Variable coupon rate based on reference index used.
There is no ceiling and floor caps.	Bonds may come with a ceiling and floor cap in which floating rates can not exceed or fall below a certain interest value respectively.
Coupons payments generally are semiannual (every 6 months) and annual.	Coupon payments may be as frequent as monthly, or every 3 months.
Generally issued by Governments and governments back entities.	Generally issued by Corporations.

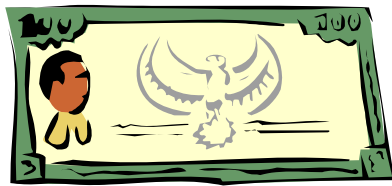
# What are Zero Coupon Bonds?

- Zero Coupon Bonds are bonds that do not offer coupons payments however they are sold at a large discount compared with the value of these bonds at maturity.
- Below illustrates the behaviour of these bonds in the market.



# What are Hybrid Bonds?

- Hybrid Bonds or “Convertible” bonds allow the bondholder to surrender his/her bond in exchange for a specified number of shares of the issuer. Hybrid bond may have fixed or floating rate coupons. Note the terms and conditions of the conversion will be stipulated in the bond prospectus.



## Bonds with equity warrants:

- These bonds allow the holder to keep his bond but still buy a specified number of shares in the firm of the issuer at a specified price. These are straight fixed rate bonds with a call option for a number of shares at a strike price over a period of time.

## Chapter 3 – What are the expected returns from ETBS?

- What are the factors to consider?
- When is a Bond sold at Premium, Par or Discounted?
- Understanding Clean Price and Dirty Price
- How do you calculate the Price of a bond ?
  - Using present value (PV) formula
  - Using PV-of-ordinary-annuity formula
  - Calculating the price for Fixed Rate ETBS
  - Calculating Zero Coupon Bonds/Sukuk
- Understanding the relationship between Bond price and yield
- How to calculate the Yield?
  - Fixed Rate Bond
  - Zero Coupon Bond
- How to calculate Yield to Maturity (YTM)?

# What are the factors to consider?

- It is important for prospective bond & sukuk buyers to know how to determine the **price** of the securities because it will indicate the yield received should the bond be purchased. In this section, we will run through some bond price calculations for various types of bond instruments.
- **Yield** is the income return on an investment. This refers to the interest or dividend received from a security and is usually expressed annually as a percentage based on either the investment's cost, its current market value or its face value.
- Fixed income securities (bonds or sukuk) can be priced at a premium, discount, or at par. If the securities prices are higher than its par value, it will sell at a premium because its interest rate is higher than current prevailing rates. If the price is lower than its par value, your investment will sell at a discount because its interest rate is lower than current prevailing interest rates.
- When calculating the price of a bond, some considerations need to be in place when calculating the maximum price in paying for the bond/sukuk, given the securities' coupon rate in comparison to the average rate most investors are currently receiving in the bond market.
- Required yield or required rate of return is the interest rate that a security needs to offer in order to encourage investors to purchase it. Usually the required yield on a bond/sukuk is equal to or greater than the current prevailing interest rates.



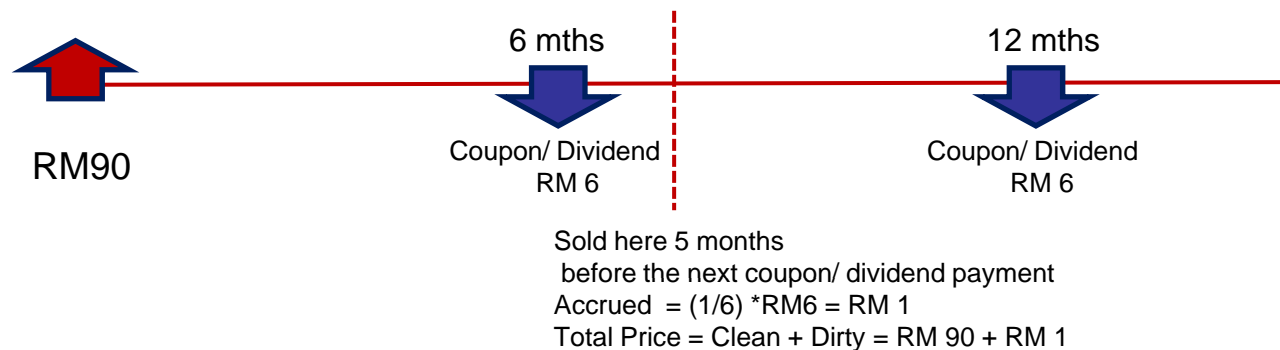
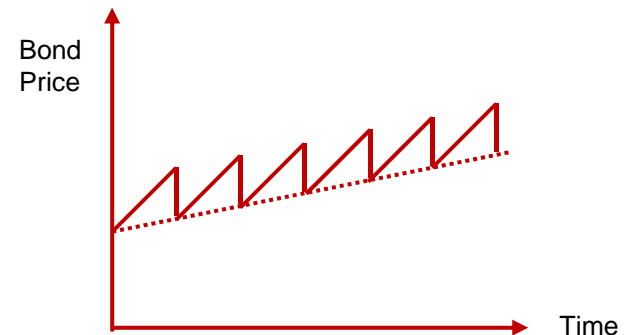
# When is a Bond sold at Premium, Par or Discounted?

A Bond can be priced at a:

- **Premium**
  - If the bond/sukuk's price is higher than its par value, it will sell at a premium because its interest rate is higher than current prevailing rates.
  
- **Discount**
  - If the bond/sukuk's price is lower than its par value, it will sell at a discount because its interest rate is lower than current prevailing interest rates.
  
- **Par**
  - If the bond/sukuk is the same price of its par value, it will sell at par because its interest rate is the same as the current prevailing interest rates.

# Understanding Clean Price and Dirty Price

- Bonds have two types of pricing mechanism **dirty** and **clean**.
- Dirty pricing is the **basic price** of the bond/ sukuk **plus** the **accrued coupon/ dividend amount** since the last coupon/dividend date; however, the clean price is the basic price of the bond/ sukuk without the accrued amount. On the coupon/dividend payment date the dirty price of the bond/ sukuk will be equivalent to the clean price of the bond/ sukuk.
- For example, assume the clean price of the bond/sukuk is RM90. The bond/sukuk is sold one month after a coupon payment (coupon payments are RM6 semi-annually). To calculate the dirty price of the bond/sukuk we calculate the accrued coupon/dividend amount first.
- Accrued coupon/dividend equals  $(1/6) \text{ mths} * \text{RM}6 = \text{RM}1$ .
- So, dirty price of bond/sukuk = RM90 plus RM1 equals RM91.



## How do you calculate the Price of a bond - present value (PV) formula?

- When you calculate the price of a bond/sukuk, you are calculating the maximum price you would want to pay for the securities, given the coupon rate in comparison to the average rate most investors are currently receiving in the bond market. Required yield or required rate of return is the interest rate that a security needs to offer in order to encourage investors to purchase it. Usually the required yield on a bond is equal to or greater than the current prevailing interest rates.
- Here is the formula for calculating a bond/sukuk's price, which uses the basic present value (PV) formula:

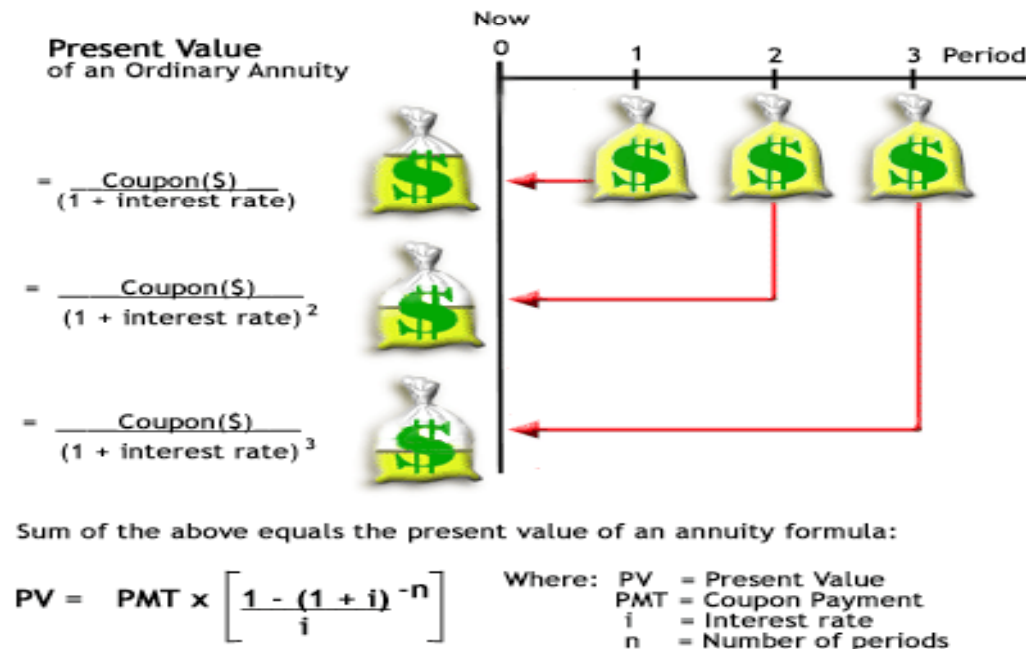
$$\text{Bond Price} = \frac{C}{(1+i)} + \frac{C}{(1+i)^2} + \dots + \frac{C}{(1+i)^n} + \frac{M}{(1+i)^n}$$

C = coupon payment  
n = number of payments  
i = interest rate, or required yield  
M = value at maturity, or par value

- The succession of coupon payments to be received in the future is referred to as an **ordinary annuity**, which is a series of payments at set intervals over a fixed period of time. (Coupons on a fixed rate bond are paid at ordinary annuity.) The first payment of an ordinary annuity occurs one interval from the time at which the debt security is acquired. The calculation assumes this time is the present.

# How do you calculate the Price of a bond - PV-of-ordinary-annuity formula ?

- You may have guessed that the bond pricing formula shown earlier may be tedious to calculate, as it requires adding the present value of each future coupon payment. Because these payments are paid at an ordinary annuity, however, we can use the shorter PV-of-ordinary-annuity formula that is mathematically equivalent to the summation of all the PVs of future cash flows. This PV-of-ordinary-annuity formula replaces the need to add all the present values of the future coupon.



# How do you calculate the Price of a bond - PV-of-ordinary-annuity formula ?

- Each full moneybag on the top right represents the fixed coupon payments (future value) received in periods one, two and three. Notice how the present value decreases for those coupon payments that are further into the future, the present value of the second coupon payment is worth less than the first coupon and the third coupon is worth the lowest amount today. The farther into the future a payment is to be received, the less it is worth today – this is the fundamental concept for which the PV-of-ordinary-annuity formula accounts. It calculates the sum of the present values of all future cash flows, but unlike the bond-pricing formula we saw earlier, it doesn't require that we add the value of each coupon payment.
- By incorporating the annuity model into the bond pricing formula, which requires us to also include the present value of the par value received at maturity, we arrive at the following formula:

$$\text{Bond Price} = C * \frac{\left[ 1 - \left[ \frac{1}{(1+i)^n} \right] \right]}{i} + \frac{M}{(1+i)^n}$$

# Calculating the price for Fixed Rate ETBS

*Example 1:* Calculate the price of an ETBS with a par value of \$1,000 to be paid in ten years, a coupon rate of 10%, and a required yield of 12%. In our example we'll assume that coupon payments are made semi-annually to ETBS' holders and that the next coupon payment is expected in six months. Here are the steps we have to take to calculate the price:

## 1. Determine the Number of Coupon Payments:

Because two coupon payments will be made each year for ten years, we will have a total of 20 coupon payments.

## 2. Determine the Value of Each Coupon Payment:

Because the coupon payments are semi-annual, divide the coupon rate in half. The coupon rate is the percentage off the bond's par value. As a result, each semi-annual coupon payment will be \$50 (\$1,000 X (0.1/2)).

## 3. Determine the Semi-Annual Yield:

Like the coupon rate, the required yield of 12% must be divided by two because the number of periods used in the calculation has doubled. If we left the required yield at 12%, our bond price would be very low and inaccurate. Therefore, the required semi-annual yield is 6% (0.12/2).

## 4. Plug the Amounts Into the Formula:

$$\begin{aligned}
 \text{Bond Price} &= 50 * \frac{\left[1 - \frac{1}{(1 + 0.06)^{20}}\right]}{0.06} + \frac{1000}{(1 + 0.06)^{20}} \\
 &= 50 * \frac{(1 - 0.3118)}{0.06} + \frac{1000}{3.207} \\
 &= 50 * 11.47 + 311.82 \\
 &= \$885.32
 \end{aligned}$$

From the above calculation, we have determined that the bond is selling at a discount; the bond price is less than its par value because the required yield of the bond is greater than the coupon rate. The bond must sell at a discount to attract investors, who could find higher interest elsewhere in the prevailing rates. In other words, because investors can make a larger return in the market, they need an extra incentive to invest in the bonds.

# Calculating Zero Coupon Bonds/Sukuk

So what happens when there are no coupon payments? For the aptly-named zero-coupon bond, there is no coupon payment until maturity. Because of this, the present value of annuity formula is unnecessary. You simply calculate the present value of the par value at maturity. Here's a simple example: Let's look at how to calculate the price of a zero coupon Bonds/Sukuk that is maturing in five years, has a par value of \$1,000 and a required yield of 6%.

## 1. Determine the Number of Periods:

Unless otherwise indicated, the required yield of most zero-coupon bonds/sukuk is based on a semi-annual coupon payment. This is because the interest on a zero-coupon bond is equal to the difference between the purchase price and maturity value, but we need a way to compare a zero-coupon bond to a coupon bond, so the 6% required yield must be adjusted to the equivalent of its semi-annual coupon rate. Therefore, the number of periods for zero-coupon bonds will be doubled, so the zero coupon bond maturing in five years would have ten periods (5 x 2).

## 2. Determine the Yield:

The required yield of 6% must also be divided by two because the number of periods used in the calculation has doubled. The yield for this bond is 3% (6% / 2).

## 3. Plug the amounts into the formula:

$$\begin{aligned}\text{Zero Coupon Bond Price} &= \frac{M}{(1+i)^n} \\ &= \frac{1000}{(1+0.03)^{10}} \\ &= \$744.09\end{aligned}$$

You should note that zero-coupon bonds are always priced at a discount: if zero-coupon bonds were sold at par, investors would have no way of making money from them and therefore no incentive to buy them.

# Understanding the relationship between Bond price and yield

The general definition of **yield** is the return an investor will receive by holding a bond to maturity. So if you want to know what your bond/sukuk investment will earn, you should know how to calculate yield. Required yield, on the other hand, is the yield or return a bond must offer in order for it to be worthwhile for the investor. The required yield of a bond is usually the yield offered by other plain vanilla bonds that are currently offered in the market and have similar credit quality and maturity.

Once an investor has decided on the required yield, he or she must calculate the yield of a bond he or she wants to buy. Let's proceed and examine these calculations.

There are 2 ways to measure yield:

1. **Current yield:** ratio of annual interest payment to the bond's market price.
2. **Yield to maturity:** the true return that the bondholder receives if a bond is held to maturity and interest payments are reinvested as the yield to maturity rate. (See bond calculator in [www.bursamalaysia.com/etbs](http://www.bursamalaysia.com/etbs))



## How to calculate the Yield?

- A simple yield calculation that is often used to calculate the yield on both bonds and the dividend yield for stocks is the current yield. The current yield calculates the percentage return that the annual coupon payment provides the investor. In other words, this yield calculates what percentage the actual dollar coupon payment is of the price the investor pays for the bond. The multiplication by 100 in the formulas below converts the decimal into a percentage, allowing us to see the percentage return:

$$\text{Current Yield} = \frac{\text{Annual Dollar Interest Paid}}{\text{Market Price}} * 100\%$$

- So, if you purchased a bond with a par value of \$100 for \$95.92 and it paid a coupon rate of 5%, this is how you'd calculate its current yield:

$$= \frac{(0.05 * \$100)}{\$95.92} * 100\% = 5.21\%$$

- Notice how this calculation does not include any capital gains or losses the investor would make if the bond were bought at a discount or premium. Because the comparison of the bond price to its par value is a factor that affects the actual current yield, the above formula would give a slightly inaccurate answer - unless of course the investor pays par value for the bond.

## How to calculate the Yield – Fixed Rate Bond?

- To correct this, investors can modify the current yield formula by adding the result of the current yield to the gain or loss the price gives the investor: [(Par Value – Bond Price)/Years to Maturity]. The modified current yield formula then takes into account the discount or premium at which the investor bought the bond. This is the full calculation:

$$\text{Adjusted Current Yield} = \left[ \frac{\text{Annual Coupon}}{\text{Market Price}} \right] * 100 + \left[ \frac{(100 - \text{Market Price})}{\text{Years to Maturity}} \right]$$

- Let's re-calculate the yield of the bond in our first example, which matures in 30 months and has a coupon payment of \$5:

$$= \frac{\$5}{\$95.92} * 100 + \frac{(100 - 95.92)}{2.5} = 6.84\%$$

- The adjusted current yield of 6.84% is higher than the current yield of 5.21% because the bond's discounted price (\$95.92 instead of \$100) gives the investor more of a gain on the investment. One thing to note, however, is whether you buy the bond between coupon payments. If you do, remember to use the dirty price in place of the market price in the above equation. The dirty price is what you will actually pay for the bond on ETBS, whereas clean price is what is quoted and traded on the OTC Market.

# How to calculate the Yield – Zero Coupon Bond?

- Now we must also account for other factors such as the coupon payment for a zero-coupon bond, which has only one coupon payment. For such a bond, the yield calculation would be as follows:

$$\text{Yield} = \left( \frac{\text{Future Value}}{\text{Purchase Price}} \right)^{\frac{1}{n}} - 1$$

n = years left until maturity

- If we were considering a zero-coupon bond that has a future value of \$1,000 that matures in two years and can be currently purchased for \$925, we would calculate its current yield with the following formula:

$$\begin{aligned} \text{Yield} &= \left( \frac{\$1000}{\$925} \right)^{\frac{1}{2}} - 1 \\ &= 0.03975 \text{ or } 3.98\% \end{aligned}$$

# How to calculate Yield to Maturity (YTM)?

- The current yield calculation we learned above shows us the return the annual coupon payment gives the investor, but this percentage does not take into account the time value of money or, more specifically, the present value of the coupon payments the investor will receive in the future. For this reason, when investors and analysts refer to yield, they are most often referring to the yield to maturity (YTM), which is the interest rate by which the present values of all the future cash flows are equal to the bond's price.
- An easy way to think of YTM is to consider it the resulting interest rate the investor receives if he or she invests all of his or her cash flows (coupons payments) at a constant interest rate until the bond matures. YTM is the return the investor will receive from his or her entire investment. It is the return that an investor gains by receiving the present values of the coupon payments, the par value and capital gains in relation to the price that is paid.
- The yield to maturity, however, is an interest rate that must be calculated through trial and error. Such a method of valuation is complicated and can be time consuming, so investors (whether professional or private) will typically use a financial calculator or program that is quickly able to run through the process of trial and error. If you don't have such a program, you can use an approximation method that does not require any serious mathematics.

(See bond calculator in [www.bursamalaysia.com/etbs](http://www.bursamalaysia.com/etbs))

# How to calculate Yield to Maturity (YTM)?

To demonstrate this method,

**Step 1:** We need to review the relationship between a bond's price and its yield. In general, as a bond's price increases, yield decreases. This relationship is measured using the price value of a basis point (PVBP). By taking into account factors such as the bond's coupon rate and credit rating, the PVBP measures the degree to which a bond's price will change when there is a 0.01% change in interest rates.

The relationship between bond price and required yield is opposite. This is due to the fact that a bond's price will be higher when it pays a coupon that is higher than prevailing interest rates. As market interest rates increase, bond prices decrease.

**Step 2:** The concept we need to review is the basic price-yield properties of bonds:

**Premium bond:** Coupon rate is greater than market interest rates.

**Discount bond:** Coupon rate is less than market interest rates.

**Step 3:** Remember to think of YTM as the yield a bondholder receives if he or she reinvested all coupons received at a constant interest rate, which is the interest rate that we are solving for. If we were to add the present values of all future cash flows, we would end up with the market value or purchase price of the bond.

## Chapter 4 – Understanding the Risks involved

- What are the risk involved?
- Who or what are credit agencies?
- Who is a Trustee?
- Who are Market Makers?
- Who are Guarantors?
- The ETBS Landscape

# What are the risks involved?

- **Credit risk**
  - This risk arises if the ETBS issuer is unable to pay the coupon payment on the coupon date or the principal amount to the lender at maturity. Government bonds and sukuk are backed by the central government, thus deemed to have a low credit risk.
  
- **Market risk**
  - This is the risk of price fluctuations and is impacted by the demand and supply in the market.
  
- **Interest rate risk**
  - Valuation of the ETBS may be affected by the changes in interest rates e.g. if the interest rate rises, ETBS prices will fall as investors may relocate their investment to capture a rise in interest rates available in other instruments, for example, in a bank deposit.

# Who and What are the rating agencies?

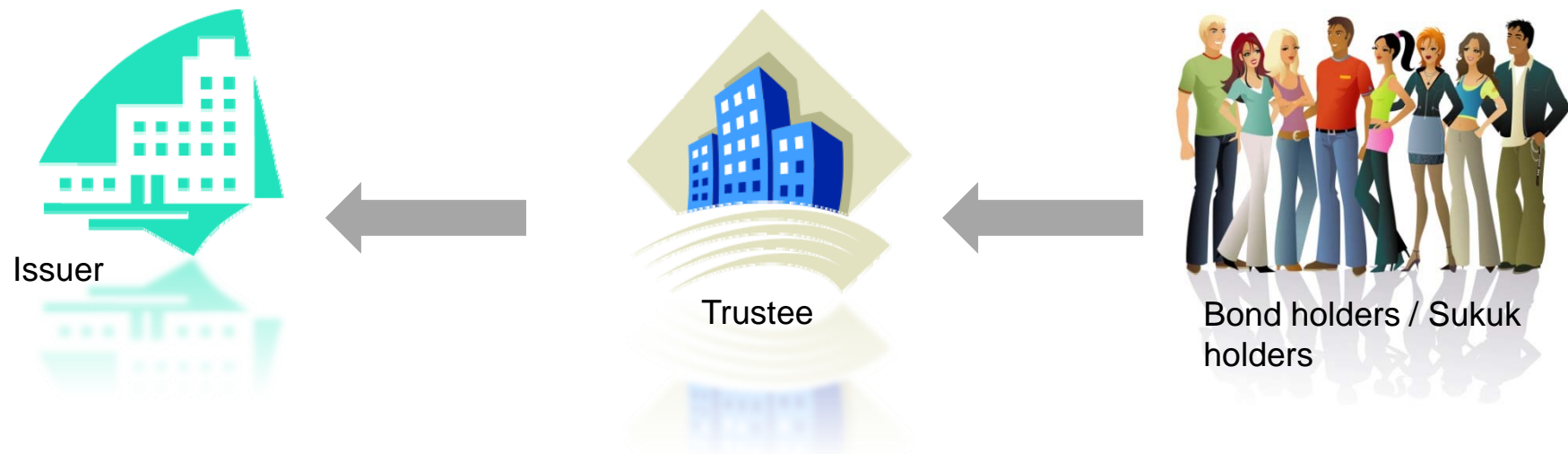
- For a bond holder it is critical to be aware of the rating of the bond as it provides a guide of risk management to the bond investment. The credit rating determines the evaluation of the bond and the credit worthiness of the issuer in terms of fulfilling its payment obligation to the bondholder.
- The credit rating is a financial indicator to potential investors of debt securities such as bonds. These are assigned by credit rating agencies such as Rating Agency Malaysia (RAM) and Malaysia Rating Corporation Berhad (MARC) using letter designations (such as AAA, B, CC) which represent the quality of a bond. Bond ratings below BBB/Baa are considered to be not investment grade and are colloquially called junk bonds.
- In Malaysia we have the following local rating agencies:

Rating Agency	Weblink
Rating Agency Malaysia (RAM)	<a href="http://www.ram.com.my">http://www.ram.com.my</a>
Malaysia Rating Corporation Berhad (MARC)	<a href="http://www.marc.com.my">http://www.marc.com.my</a>



# Who is a Trustee?

- Trustee is a financial institution who is given fiduciary powers by a bond issuer to enforce the terms of the bond prospectus/ Indenture. In Malaysia this is known as the term sheet or the principal term and conditions (PTC)
- When a company issues a bond they will see to it that the bond coupon/dividend payments are made as scheduled e.g. to monitor the performance and utilization of the bond, (an independent check and balance on funds collected from the public). In the event of default the trustee will call for a bondholders meeting to extract as much value from the company to payback the bondholder. Thus the trustee role is also to protect the interest of the bondholders if a default were to happen. These processes are outlined in the **trust deed**.



# Who are Market Makers?

- A market maker is a bank or brokerage company that quotes both a buy and a sell price of a financial instrument. They offer bid and ask prices to investors or traders via the Exchange.
- The market makers provide a required amount of liquidity to the market, and take the other side of trades when there are short-term buy-and-sell-side imbalances.



Bond holders / Sukuk holders



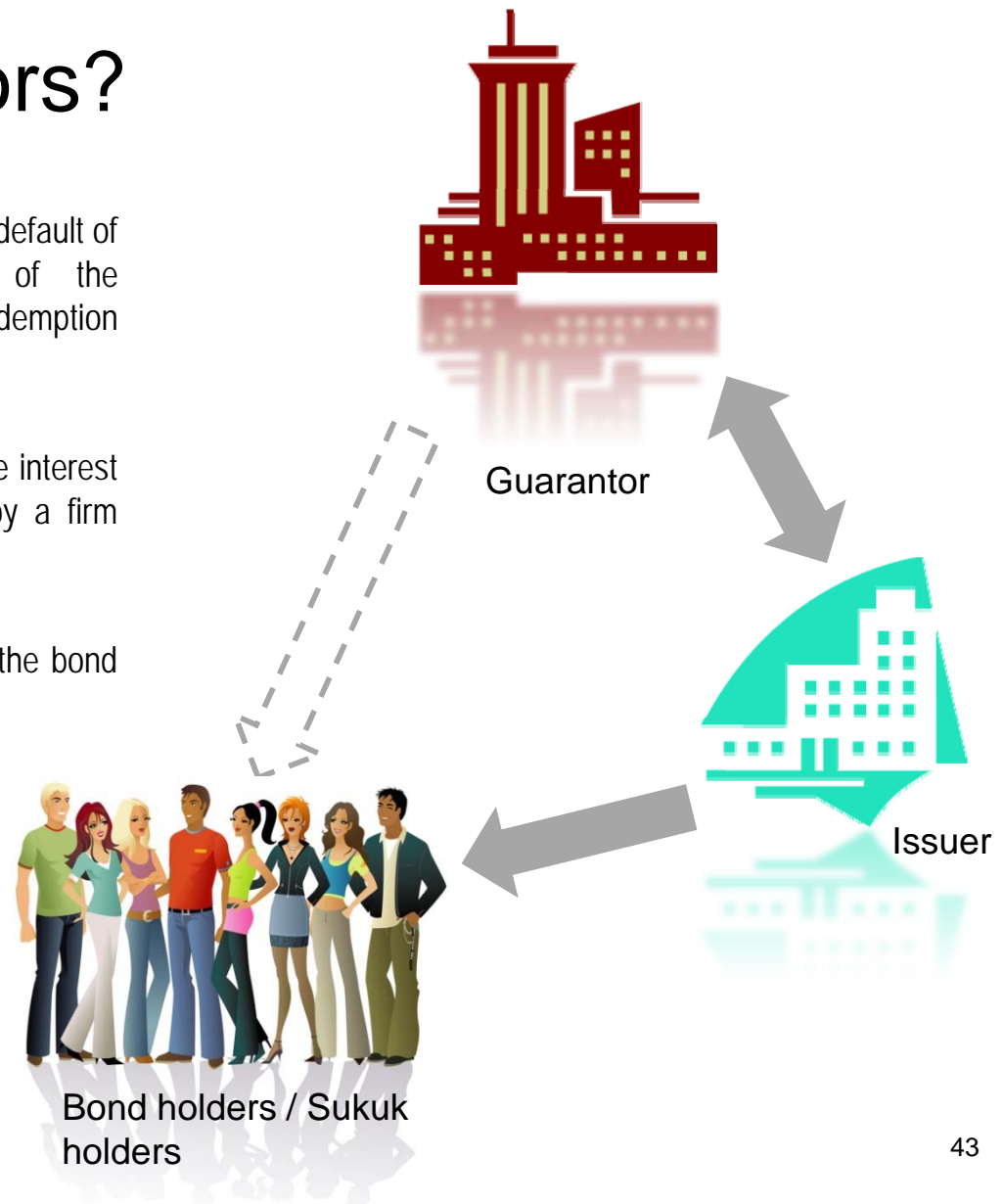
Market Maker



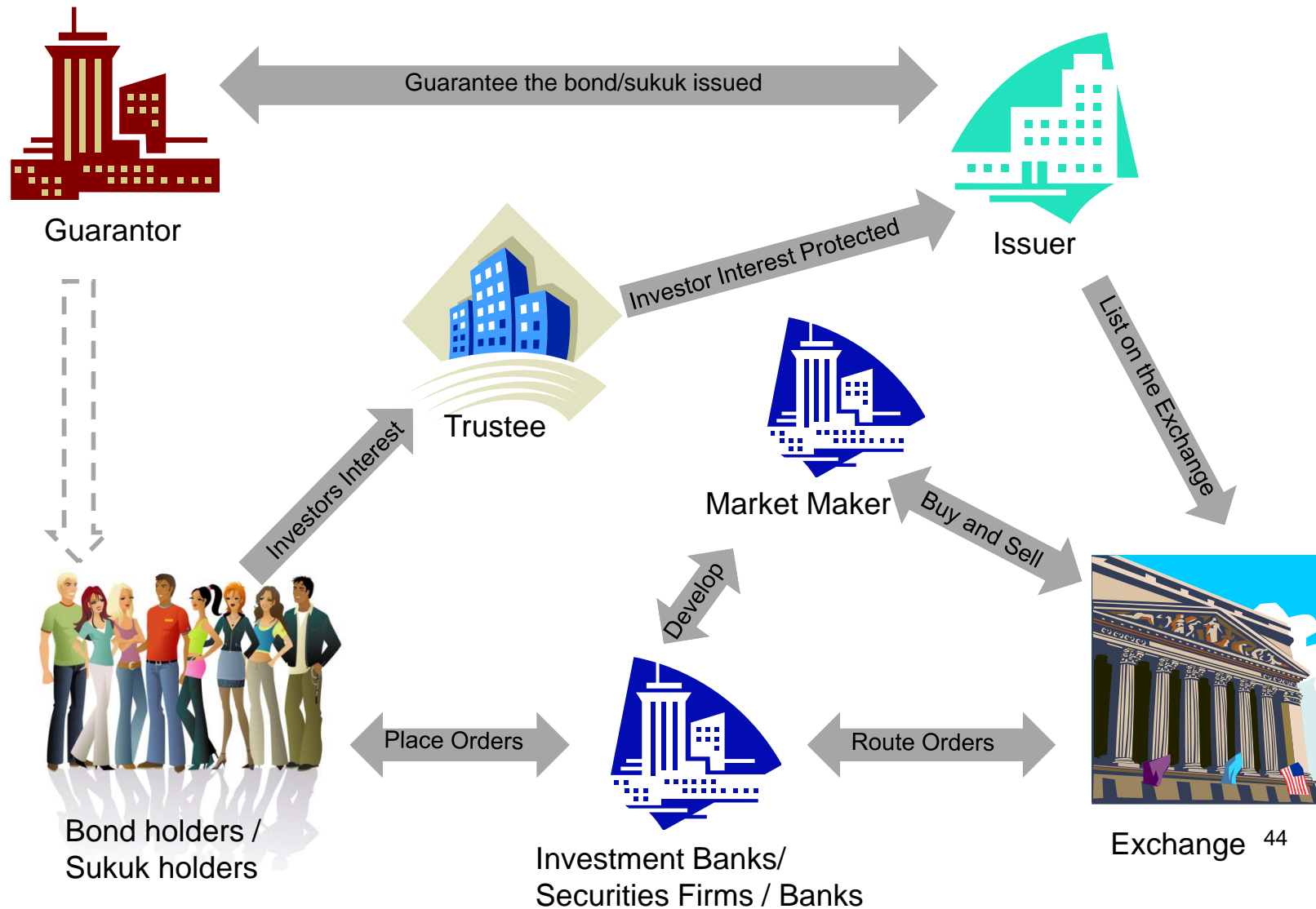
Exchange

# Who are Guarantors?

- A Guarantor is an organization that upon the default of the issuer, guarantees the payment of the coupon/dividend as well as the principal redemption amount.
- Thus a guaranteed bond is a bond where the interest and principal on the bond is guaranteed by a firm other than the issuer of the bond.
- Not all bonds are guaranteed, thus refer to the bond prospectus or indenture for more information.



# The ETBS Landscape



## Chapter 5 – How to trade ETBS?

- Buying and Selling on Bursa Malaysia
- Making Money through interest and capital gains
- Statements

# Buying and Selling on Bursa Malaysia

- **Buying a bond**
  - Through Primary Market : Via subscription similar to applying for an IPO or via placement via your banks.
  - Through Secondary Market : Via the stock exchange similar to buying a share.
  
- **Selling a bond**
  - Through the stock exchange: similar to selling a share.
  - If held until maturity, investor will get back the nominal value of the bond on maturity date as well as the interest or dividend payable.
  
- **Trading on the Exchange**
  - All ETBs are listed within the *"Loans and Bonds" Board*, and under that there are *"Bond Conventional"* and *"Bond Islamic"* sectors.
  - Short and long name of bond displayed on the Front End (Web or Order Management Systems) for entering orders into Bursa Securities will include the name of issuer, the coupon rate and maturity date (in the case of short name, it will be abbreviated).
    - Short name example : **ABC4%1225** (where **ABC** the is name of the issuer, **4%** is the coupon rate and **1225** is the month and year of the maturity of the bond/sukuk)

## Making money: Interest and capital gains (1/2)

- There are two ways to make money from a bond – either by earning **interest** or **capital gains**.
- Let's say that you have a RM 1,000 bond that pays 6% interest for five years. If you hold that bond until the very end of this term (known as the maturity date), you'll collect five interest payments of RM 60 for a total of RM 300.

Principal amount	Year 1 (6% interest on 1,000)	Year 2 (6% interest on 1,000)	Year 3 (6% interest on 1,000)	Year 4 (6% interest on 1,000)	Year 5 (6% interest on 1,000)	Total principal and interest (at maturity date of 5 years)
RM 1000.00	RM 60.00	RM 60.00	RM 60.00	RM 60.00	RM 60.00	RM 1,300.00

- You could also decide to sell that bond to someone else for RM1,100. In that case you'd earn a capital gain of RM100 (plus whatever interest payments you had received at coupon/dividend payment dates in the meantime).


## Making money: Interest and capital gains (2/2)

- Your RM1,000 bond pays 6% interest. Since you bought that bond, however, interest rates have gone down. Similar companies are now only offering a 5% interest rate on their bonds. Your original rate looks pretty good to another investor. So you can sell that 6% bond at a higher cost than you paid for it, which is called selling for a *premium*.
- However, if interest rates have gone up, and similar companies are now offering 8%, you may have to sell your bond for less – which is known as selling at a *discount*.
- Interest rates and bond prices, then, are like a see-saw – when interest rates go down, bond prices go up (and vice versa).
- Thus making money from bonds can be via both ways, namely capital gains or interest gains. However in the case of interest gain, most of the time, this is predictable, where as capital gains depends on market timing and conditions.



# Statements

- Your CDS Account is managed by Bursa Depository, who ensures that the book keeping of all of your CDS accounts are accurate and represents the assets of your holdings with the exchange.
- Bursa Depository will provide a monthly statement for active accounts and bi-annual for inactive accounts to investors.
- This statement, will show your status of your holdings in various shares and bonds purchased on Bursa Securities market.
- In the case if you have multiple accounts, you may request via the broker to have your statements consolidated, meaning all your assets are captured in one statement.



**BURSA MALAYSIA**  
Bursa Malaysia Depository Sdn Bhd 165570W  
15th Floor, Exchange Square, Bukit Kewangan, 50200 Kuala Lumpur. Tel : 03-20347000 Fax : 03-20263709

**PENYATA AKAUN STATEMENT OF ACCOUNT**  
Tempoh Period : -

( - )

NAME  
ADDRESS

STATUS  
REFERENCE NUMBER  
BROKER

Tarikh Date	Jenis Type	Butiran Urus Niaga Transaction Details	Jumlah Urus Niaga Transaction Amount	Baki Balance

"Be a Professional Trader". Register as a Local Participant today.  
Contact: [locals@bursamalaysia.com](mailto:locals@bursamalaysia.com) or visit [www.bursamalaysia.com/derivatives/](http://www.bursamalaysia.com/derivatives/)