

NATIONAL STOCK EXCHANGE OF INDIA LIMITED

Capital Market

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FAQ on Corporate Bond**1. What are securities?**

Securities are financial instruments that represent a creditor relationship with a corporation or government. Generally, they represent agreement to receive a certain amount depending on the terms contained within the agreement. It represents a promise to pay bondholders a fixed sum of money (called the bond's principal, or par or face value) at a future maturity date, along with periodic payments of interest (called coupons).

2. What are fixed income securities?

Fixed income securities are investment where the cash flows are according to a pre-determined amount of interest, paid on a fixed schedule. Popularly known as Debt instrument.

3. What are the different types of fixed income securities?

The different types of fixed income securities include government securities, corporate bonds, Treasury Bills, Commercial Paper, Strips etc.

4. What is the difference between debt and equity?

Sr. No.	PARAMETERS	EQUITY	DEBT
1.	Ownership	Owners of the Company	Lenders of the Company
2.	Risk	High risk	Low risk
3.	Return	Variable	Fixed
4.	Maturity	Till the existence of the company	Pre - decided

5.	Liquidation Hierarchy	Last preference	First preference
6.	Voting Rights	Eligible for voting	Non-eligible for voting

5. What are Corporate Bonds?

In broader terms Corporate bonds **are** fixed income securities issued by corporates i.e. entities other than Government.

6. What are the types of corporate bonds?

Corporate bonds can broadly classify as follows:-

Issuer	Maturity	Coupon	Option	Redemption
Corporates	Short term	Zero coupon bond	Put option	Single redemption
Banks	Medium term	Fixed coupon	Call option	Multiple redemption / Amortising bond
PSUs	Long Term	Floating coupon		
Local Bodies	Perpetual			

❖ Based on Issuer :

Issuers of Corporate Bonds can be broadly classified in following classes:

- Bonds issued by Local Bodies
- Bonds issued by Public Sector Units
- Bonds issued by Financial Institutions
- Bonds issued by Banks
- Bonds issued by Corporates

❖ Based on Maturity Period

- **Short Term Maturity:** - Security with maturity period less than one year.
- **Medium Term:** - Security with maturity period between 1 year and 5 year.
- **Long Term Maturity:** - Such securities have maturity period more than 5 years
- **Perpetual:** - Security with no maturity. Currently, in India Banks issue perpetual bond.

❖ Based on Coupon

- **Fixed Rate Bonds:** - have a coupon that remains constant throughout the life of the bond.
- **Floating Rate Bonds:** - Coupon rates are reset periodically based on benchmark rate.
- **Zero-coupon Bonds** no coupons are paid. The bond is issued at a discount to its face value, at which it will be redeemed. There are no intermittent payments of interest

❖ Based on Option

- **Bond with call option:** - This feature gives a bond issuer the right, but not the obligation, to redeem his issue of bonds before the bond's maturity at predetermined price and date.
- **Bond with put option:** - This feature gives bondholders the right but not the obligation to sell their bonds back to the issuer at a predetermined price and date. These bonds generally protect investors from interest rate risk.

❖ Based on redemption

- Bonds with single redemption: - In this case principal amount of bond is paid at the time of maturity only.
- Amortising Bonds: - A bond, in which payment made by the borrower over the life of the bond, includes both interest and principal, is called an amortizing bond.

7. What are the key components of corporate bonds?

There are many components of corporate bonds. Major components are given below-

Issue Price is the price at which the Corporate Bonds are issued to the investors. Issue price is mostly same as Face Value in case of coupon bearing bond.

In case of non-coupon bearing bond (zero coupon bond), security is generally issued at discount.

Face Value (FV) is also known as the par value or principal value. Coupon (interest) is calculated on the face value of bond. FV is the price of the bond, which is agreed by the issuer to pay to the investor, excluding the interest amount, on the maturity date. Sometime issuer can pay premium above the face value at the time of maturity.

Coupon / Interest is the cash flow that are offered by a particular security at fixed intervals / predefined dates. The coupon expressed as a percentage of the face value of the security gives the coupon rate.

Coupon Frequency means how regularly an issuer pays the coupon to holder. Bonds pay interest monthly, quarterly, semi-annually or annually.

Maturity date is a date in the future on which the investor's principal will be repaid. From that date, the security ceases to exist.

Call / Put option date is the Date on which issuer or investor can exercise their rights to redeem the security.

Maturity / Redemption Value is the amount paid by issuer other than coupon payment is called redemption value. If the redemption proceeds are more than the face value of the bond/debentures, the debentures are redeemed at a premium. If one gets less than the face value, then they are redeemed at a discount and if one gets the same as their face value, then they are redeemed at par.

Example:-

E.g.:- Security with FV of Rs.1000/- issued on April 01, 2011, for a period of 10 year at Rs. 1000/- , Coupon of 12% p.a. is paid every 6 month on April & October 01, 2011.

Issue price = Rs.1000/-

Face value = Rs.1000/-

Coupon = 12%

Coupon Frequency = Half yearly

Maturity Date = April 01, 2021

Put Option =Not applicable

Call option =Not applicable

Redemption Value = Rs.1000/-

8. What is credit quality?

Credit quality is an indicator of the ability of the issuer to pay back his obligation. The credit quality of fixed income securities is usually assessed by independent rating agency such as CRISIL, ICRA etc.

9. Why should one invest in corporate bonds?

- 1) High return – Compare to Government securities and Bank Deposits
- 2) Low risk – Compare to Equity
- 3) Fixed and Regular Income
- 4) Flexibility as various types of bonds available
- 5) Tradability
- 6) Capital appreciation

10. Bond Analytics

a. Broken period

In case of a transaction in bonds occurring between two interest payment dates, then the period between last interest payment date to settlement date is considered as broken period.

b. Accrued Interest

This is an interest payment, which is paid by seller to buyer for broken period. Accrued interest generally calculated as **Broken period*coupon rate /365**.

Last interest payment date	15-Oct-10
Next interest payment date	15-Apr-11
Settlement Date	20-Jan-11
Coupon rate	10%
Broken Period	97
Accrued Interest	Rs. 2.66/-

c. Dirty Price

It is the price of the bond including Accrued interest. The trading in the Capital market takes place at this price and it keeps on fluctuating during the day.

d. Clean Price

It is the price of the Bond excluding Accrued interest. The trading in the Wholesale Debt market takes place at this price.

The above two concepts can be better understood with the help of an example assuming that **10% SBI bond** is trading at **Rs.960.45** on **22-Sept-2011** and the last interest payment date was 31-Mar-2011 then the Accrued interest on the given bond will be Rs.4.81 per bond. The price at which the bond is trading in the market i.e.Rs.960.45 will be the Dirty Price and Rs.955.64 (i.e.960.45-4.81) will be clean price of the security.

e. Day count convention

The market uses quite a few conventions for calculating broken period and accrued interest. The various types of day count conventions are given below-

- 30/360: This convention considers each month, including February, as having 30 days and the year as consisting of 360 days. There are 2 variations to this convention: US NASD convention and the European 30/360 convention. The 30/360 convention is used in the treasury bond markets in many countries. Indian treasury markets use the European 30/360 day count convention.
- Actual/360: This convention counts the actual number of days in a month, but uses 360 as the number of days in the year.
- Actual/actual: This convention uses the actual number of days in the month and the actual number of days in the year, 366, for a leap year. Indian corporate bonds use Actual / Actual day convention for corporate bonds.
- Actual/365: This convention uses the actual number of days in a month and 365 days as the days in the year

The various day count convention can be explained with the help of following example:

	30/360	Actual/360	Actual/365	Actual/Actual
LIP Date	15-Jan-08	15-Jan-08	15-Jan-08	15-Jan-08
Settlement Date	05-Apr-08	05-Apr-08	05-Apr-08	05-Apr-08
Coupon Rate (%)	10.00	10.00	10.00	10.00
Face Value	100.00	100.00	100.00	100.00
No. of Days	80	81	81	81

Accrued Interest	2.2222	2.2500	2.2192	2.2131
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f. Yield

Yield on a security is the implied interest offered by a security over its life, given its current market price. It generally indicates return on the investment.

g. Relationship between the Price of Bond and Yield

The Price of the Bond and the yield are inversely related to each other i.e. rise in one leads to fall in other and vice versa.

h. Difference between coupon rate and yield

The difference between coupon rate and yield arises because the market price of a security might be different from the face value of the security. Since coupon payments are calculated on the face value, the coupon rate is different from the yield. The relation between price, coupon rate and yield is given below-

- If Coupon rate > YTM, the bond will sell above its par value i.e. at premium.
- If Coupon Rate < YTM, the bond will sell below its par value i.e. at discount.
- If Coupon Rate = YTM, the bond will sell at par value.

11. What are different types of Yield?

1) Current yield

This is the yield or return derived by the investor on purchase of the instrument (yield related to purchase price). It is calculated by dividing the coupon rate by the purchase price of the bonds.

For Example: If an investor buys a 10% Rs 100 debenture of ABC company at Rs 90, his current Yield computed on the instrument $\text{current Yield} = (10\% \times 100) / 90 \times 100$, That is 11.11% p.a.

2) Yield to maturity (YTM)

The yield or the return on the instrument is held till its maturity is known as the Yield-to-maturity (YTM). Given a pre-specified set of cash flows and a price, the YTM of a bond is that rate which equates the discounted value of the future cash flows to the present price of the bond. It is the internal rate of return of the valuation equation. This is the

most widely used yield calculation method. Yield to maturity represents the yield on the bond, provided the bond is held to maturity and the intermittent coupons are re-invested at the same YTM rate. In other words, when we compute YTM as the rate that discounts *all the cash flows* from the bond, at the same YTM rate, what we are assuming in effect is that each of these cash flows can be re-invested at the YTM rate for the period until maturity.

For example, if we find that 5.995% 2009 bond is being issued at a price of Rs. 108, (for the sake of simplicity we will begin with the valuation on a cash flow date), we can state that,

$$108 = \frac{5.995}{(1+r)} + \frac{5.995}{(1+r)^2} + \dots + \frac{105.995}{(1+r)^{18}}$$

In this case ‘r’ denotes the Yield to Maturity.

To simplify the concept another example is given below-

A security is purchased at Rs. 110/- (dirty price) on January 15, 2009. Security pays interest on every March 15 at 11%. Security will mature on March 15, 2011.

Expected cash inflow of buyer from the security:-

Dates	Inflow
March 15, 2009	11
March 15, 2010	11
March 15, 2011	111

Now the YTM is rate at which the Present value of the above inflow will equal to Rs.110/-. At 10.54% the present value of above inflows become Rs.110/- Hence YTM is 10.54%.

Dates	Inflow	Present Value at 10.54%
March 15, 2009	11	10.82
March 15, 2010	11	9.79
March 15, 2011	111	89.39
	Total	110/-

3) Nominal Yield

The nominal yield on a bond is simply the percentage of interest to be paid on the bond periodically. It is calculated by dividing the annual coupon payment by the par value of the bond. It is important to note that the nominal yield does not estimate return accurately unless the current bond price is the same as its par value. E.g. If coupon rate is 10% then nominal yield is 10%.

4) Yield to maturity for zero coupon bond

In the case of a zero coupon bond, since there are no intermittent cash flows in the form of coupon payments, the YTM is the rate that equates the present value of the maturity or redemption value of the bond to the current market price, over the distance in time equal to the settlement and maturity dates.

5) Realized Yield

The realized yield of a bond is calculated when an investor plans to hold a bond only for a certain period of time, rather than to maturity. In this case, the investor will sell the bond, and this projected future bond price must be estimated for the calculation. Because future prices are hard to predict, this yield measurement is only an estimation of return.

Corporate Bond Market in India

12. How the corporate bonds are issued in India?

Corporate bonds can be issued in two ways:-

- **Public issue**

In public issue, corporations issue bonds to the market as a whole. Institutions as well as retail investors can participate in this issue. The cost of borrowing is little high in case of public issue.

- **Private placement**

In private placement corporate, generally park the bond issuance with few institutions. In India, more than 90% of the corporate bonds are issued through private placement. It is an easiest and cheapest way of borrowing corporate bonds.

13. Who are the major issuers of corporate bonds in India?

Public sector units, Banks, corporates, Financial Institutions are major issuer of corporate bonds

14. Where are the corporate bonds listed?

In NSE, the private placement securities are listed and traded in WDM segment of the Exchange. Public issues are listed and traded in CM segment of the Exchange

15. How trading takes place in Capital Market segment for corporate bonds?

Currently, trading in corporate bonds in CM segment happens along with equity shares. There is no major difference.

Market: - Normal market

Tick Size: Rs0.01

Price Band: 20%

Series: Corporate bonds are identified with separate series as follows:-

Security	Rolling settlement	Trade for Trade
Non-convertible Debt	N@ / Y@	U@ / M@ (Except MF and ME)
Convertible Debt	D@	S@

Trading price: - Trading in corporate bonds takes place at **dirty price**.

Settlement price:- Settlement in corporate bond take place at **dirty price**.

Clearing and settlement: - Through NSCCL. In case of rolling settlement, netting will be done.

16. What are the Corporate Bonds available for trading in CM segment?

http://www.nseindia.com/live_market/dynaContent/live_watch/equities_stock_watch.htm?cat=SEC

17. Where will I get details of today's Corporate Bond trade data in CM segment?

http://www.nseindia.com/live_market/dynaContent/live_watch/equities_stock_watch.htm?cat=SEC

18. What are the factors investors should keep in mind while trading / investing in Corporate Bonds?

- **Record date and Ex-date for interest payment:** - Record date is the date on which all the bond holders registered in the security till end of the date will be eligible for the interest payment for that period. The issuer sets record date for interest payment.

Based on the record date, exchange sets **Ex-date for interest payment**. The trade take place from ex-date is not eligible for interest payment for that period. Trades take place after Ex-date till IP date, is at Ex-interest price i.e. price excluding interest. In such case, accrued interest will be zero.

- **Credit rating:** - plays an important role in the trading of the bonds as the highly rated bonds are more liquid in comparison to the bonds with the low rating.
- **Interest rate condition:** – If interest rates rise the price of the bonds will fall.
- **Reinvestment of coupon:** - In case of corporate bond investor often receives cash flow at a regular interval. To get the desired yield it is required to get opportunity for investing such inflows.
- **Taxation:** - Tax applicable on interest received. No STT is applicable on corporate bond trading. Capital gain tax, short term as well as long term, is applicable.
- **Li**
- **quidity:** - Currently corporate bond market is not liquid.

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