Debt Markets

(Source: BSE Website-www.bseindia.com)

Introduction

The Capital Market comprises of equities market and debt market. The Debt market is a market for the issuance, trading and settlement in debt instruments of various types. Debt instruments, called fixed income securities, are issued by a wide range of organizations, like the Central and State Governments, statutory corporations or bodies, banks, financial institutions and corporate bodies.

Fixed Income Securities

Fixed Income securities are one of the most innovative and dynamic instruments evolved in the financial system ever since the inception of money. Based as they are on the concept of interest and time-value of money, Fixed Income securities personify the essence of innovation and transformation, which have fueled the explosive growth of the financial markets over the past few centuries.

Fixed Income securities offer one of the most attractive investment opportunities with regard to the safety of money invested, adequate liquidity, and flexibility in structuring a portfolio, easier monitoring, long term reliability, and certainty of returns from investment made. They are an essential component of any portfolio of financial and real assets, whether in the form of pure interest-bearing bonds, varied type of debt instruments, or asset-backed mortgages, and securitised instruments.

Fixed Income Markets - Powering the World

The Fixed Income Securities market was the earliest of all the securities markets in the world and has been the forerunner in the emergence of the financial markets as the engine of economic growth across the globe. The Fixed Income Securities Market, also known as the debt market or the bond market, is easily the largest of all the financial markets in the world today in terms of market capitalisation. The Debt Market has, as such, a very prominent role to play in the efficient functioning of the world financial system, and in catalyzing the economic growth of nations across the globe.

Indian Debt Market - Pillars of the Indian Economy

The Debt Market plays a very critical role for any growing economy which needs to employ a large amount of capital and resources for achieving the desired industrial and financial growth. The Indian economy which has grown at more than 7% p.a. in the last decade and is on the take off stage for double digit growth would have to meet its resources requirements from a robust and an active debt market in India.

The Government Securities market, called 'G-Sec' market, is the oldest and the largest component of the Indian debt market in terms of market capitalization, outstanding securities and trading volumes. The G-Secs market plays a vital role in the Indian economy as it provides the benchmark for determining the level of interest rates in the country through the yields on the government securities, which are referred to as the risk-free rate of return in any economy.

Besides G-Sec market, there is an active market for corporate debt papers in India which trades in short term instruments, such as commercial papers and certificate of deposits issued by banks and long term instruments, such as debentures, bonds, zero coupon bonds and step up bonds.

Wholesale Debt Market Segment (WDM)

Government securities market, the largest and oldest component of Indian debt market, was a very active segment on BSE since the beginning of the 19th century. Government papers were traded actively at BSE. However, wholesale debt market segment for the government securities for institutional investors was further introduced by BSE pursuant with following notifications issued by RBI.

- DBOD. FSC. BC. No. 39 /24.76.002/2000 dated October 25, 2000.
- IDMC. PDRS. PDS. No PDS-2 /03.64.00/2000-01 dated November 13, 2000.
- DBS. FID No. C 10 / 01.08.00 / 2000-0122 dated November, 2000

The above notifications permitted Banks, Primary Dealers and Financial Institutions in India to undertake transactions in debt instruments among themselves or with non-bank clients through the members of BSE Limited. The Wholesale Debt Market Segment of BSE commenced its operations on June 15, 2001. All existing cash market members of the Exchange who fulfill the networth criteria of Rs. 30 Lacs are eligible for Wholesale Debt Market (WDM) membership.

Growth in the WDM

The BSE WDM Debt Segment has shown a gradual but consistent growth in its turnover in the past few years, with increased participation from the mainstream banking and institutional players. This Segment expects a sustained rise in its turnover and participation, in the coming years, with the initiation of activity by the new members and continued support and participation of major Banks, Primary Dealers and financial institutions.

Retail Debt Market Segment (RDM)

The Retail Debt Market, in the new millennium, presents a vast kaleidoscope of opportunities for the Indian investor whose knowledge and participation hitherto has been restricted to the equity market. The development of the Retail Debt Market has engaged the attention of policy makers, regulators and the Government in the past few years. The potential of the Retail Debt Market can be gauged from the investor strength which is more than 40 million in the Indian equity market, has powered the tremendous growth and transformation of the stock markets in recent times. Recognizing this opportunity at a very early stage, BSE has consistently been in the forefront of the campaign for the creation of a Retail Debt Market, and has expounded the potential and need for retail trading in G-Secs in the past few years in various important forums and to the key regulatory authorities.

Emergence of Retail Debt Market

It would surprise many to know that a retail debt market was, at one point of time, very much present in India. Right through the forties and fifties and until the early sixties, a good proportion of the holdings of Government securities were concentrated in individual investors; available statistics indicate that more than half of the holdings in Government securities were concentrated in retail investors in the early 50s.Today, there exists an inherent need for households to diversify their investment portfolio so as to include various debt instruments, including Government securities. Retail investors would have a natural preference for fixed income returns and especially so in the current situation of increasing volatility in the financial markets. The Government Securities (G-Secs) are the one of the best investment options for an individual investor today in the financial markets due to the following factors:

- Zero default risk – because of their sovereign guarantee, they ensure total safety of all investments in G-Secs.
- Lower average volatility in bond prices
- Greater returns as compared to the conventional safe investment avenues, like Bank Deposits and Fixed Deposits, though they also contain credit risk
- Higher leverage -Greater borrowing capacity against G-Secs due to their zero risk status
- Wider range of innovations in the nature of securities, like T-Bills, Index linked Bonds, Partly Paid Bonds and others, like STRIPS and securities with call and put options.
- Better and greater features to suit a large range of investment profiles and investor requirements
- Growing liquidity and an increased turnover in recent times in the Indian Debt Markets

Retail Trading in G-Secs

The Government of India and RBI, recognizing the need for retail participation, had in early 2000 announced a scheme to enable retail participation through a non-competitive bidding facility in the G-Sec auctions with a reservation of 5% of the issue amount for non-competitive bids by retail investors. The Retail Trading in G-Secs commenced on January 16, 2003 in accordance with the SEBI Circular bearing ref. no. SMD/Policy/GSEC/776/2003 dated January 10, 2003. The Indian Fixed Income Markets, which until some time ago, was the mainstay of the wholesale investors, were made accessible to the retail investors, thanks to some path-breaking initiatives taken by the Government of India - Ministry of Finance, RBI and SEBI-to enable retail trading in G-Secs through stock exchanges. BSE has, for long, been an ardent advocate of the need to enable the participation of the 28 million Indian investor multitude in the Indian Fixed Income Markets.

The Retail Debt Market Module of BSE aims at providing an efficient and reliable trading system for Gsec. The key features of the system are:

- Trading: By electronic order matching, based on price-time priority through the BOLT (BSE OnLine Trading) System with the continuous trading sessions from 9.00 a.m. to 3.30 p.m, as is operational in the Equities Segment. Retail Trading in G-secs is on a Rolling Settlements basis with a T+2 Delivery Cycle.
- Clearing and Settlement: The Clearing and Settlement mechanism for the Retail trading in G-Secs is based on the existing institutional mechanism available at BSE. The trades executed throughout the continuous trading sessions are netted out at the end of the trading hours through a process of multilateral netting. The transactions are netted out memberwise and then securitywise, so as to determine the net settlement and payment obligations of the members. The Delivery obligations and the payment orders in respect of these members are generated by the Clearing and Settlement system of BSE. These statements indicate the pay-in and pay-out positions of the members for securities and funds, who then give the necessary instructions to their Clearing Banks and depositories. The entire risk management, and the clearing and settlement activities for the trades executed in the Retail Debt Market System are undertaken by BSE Exchange Clearing House.
- Holding and Transfer of G-Secs: For retail trading through BSE, the G-secs can be held by investors in the same Demat account as is used for equity at the Depositories. NSDL and CDSL hold the combined quantity of G-Secs in their SGL-II A/cs of RBI, meant only for client holdings.

Indian Corporate Debt Market (ICDM)

Former Finance Minister Mr. P. Chidambaram, in his 2006 budget speech, had announced the intention of the Government to create a single, unified exchange-traded market for corporate bonds in India. Subsequently, the Securities and Exchange Board of India (SEBI) vide its circular, dated December 12, 2006, entrusted the responsibility of setting up a reporting platform for all corporate debt transactions executed in the country to BSE Limited. BSE developed a reporting platform - Indian Corporate Debt Market (ICDM) for reporting all corporate deals done in respect of debt that is listed on any Indian stock exchange , are in demat form, and are over Rs. 1 lakh in face value as prescribed by SEBI. The platform, implemented through Internet, called ICDM, was being used by large over 400 participants, as on March 2010, in the Debt Market. On observing wide participation and depth in the Corporate Bond market, SEBI vide its circular dated April 13, 2007, granted permission to BSE to launch a trading platform. In compliance to the circular BSE launched the platform with essential features of an Over the Counter (OTC) Market in July 2008. ICDM shall gradually migrate into an anonymous order matching system.

FREQUENTLY ASKED QUESTIONS ON DEBT MARKETS

1. What is the Debt Market?

The Debt Market is the market where fixed income securities of various types and features are issued and traded. Debt Markets are therefore, markets for fixed income securities issued by the Central and State Governments, Municipal Corporations, Govt. bodies and commercial entities, like Financial Institutions, Banks, Public Sector Units, Public Ltd. companies and also structured finance instruments.

2. What is the Money Market?

The Money Market is basically concerned with the issue and trading of securities with short term maturities or quasi-money instruments. The Instruments traded in the money-market are Treasury Bills, Certificates of Deposits (CDs), Commercial Paper (CPs), Bills of Exchange and other such instruments of short-term maturities (i.e., not those exceeding 1 year with regard to the original maturity)

3. Why should one invest in fixed income securities?

Fixed Income securities offer a predictable stream of payments by way of interest and repayment of principal at the maturity of the instrument. The debt securities are issued by the eligible entities against the moneys borrowed by them from the investors in these instruments. Therefore, most debt securities carry a fixed charge on the assets of the entity and generally enjoy a reasonable degree of safety by way of the security of the fixed and/or movable assets of the company.

- The investors benefit by investing in fixed income securities since they preserve and increase their invested capital, and are also ensured about the receipt of regular interest income.
- The investors can even neutralize the default risk on their investments by investing in Govt. securities, which are normally referred to as risk-free investments, due to the sovereign guarantee on these instruments.
- The prices of Debt securities display a lower average volatility as compared to the prices of other financial securities, and ensure the greater safety of accompanying investments.
- Debt securities enable wide-based and efficient portfolio diversification, and thus assist in portfolio risk-mitigation.

4. What are the advantages of investing in Government Securities (G-Secs)?

The Zero Default Risk of the G-Secs. offers one of the best reasons for investments in them. Hence, it enjoys the greatest amount of security possible. The other advantages of investing in G- Secs are:

- Greater safety and lower volatility as compared to other financial instruments
- Variations are possible in the structure of instruments, like Index linked

Bonds, STRIPS

- Higher leverage available in case of borrowings against G-Secs.
- No TDS on interest payments
- Tax exemption for interest earned on G-Secs. up to Rs.3000/- over and above the limit of Rs.12000/- under Section 80L (as amended in the latest Budget)
- Greater diversification opportunities
- Adequate trading opportunities with continuing volatility expected in interest rates the world over

5. Who can issue fixed income securities?

Fixed income securities can be issued by almost any legal entity like Central and State Govts., Public Bodies, Banks and Institutions, statutory corporations and other corporate bodies. There may be legal and regulatory restrictions on each of these bodies on the type of securities that can be issued by each of them.

6. What are the different types of instruments, which are normally traded in this market?

The instruments traded can be classified into the following segments based on the characteristics of the identity of the issuer of these securities:

Market Segment	Issuer	Instruments
Government Securities	Central Government	Zero Coupon Bonds, Coupon Bearing Bonds, Treasury Bills, STRIPS
	State Governments	Coupon Bearing Bonds
Public Sector Bonds	Government Agencies / Statutory Bodies	Govt. Guaranteed Bonds, Debentures
	Public Sector Units	PSU Bonds, Debentures, Commercial Paper
Private Sector Bonds	Corporates	Debentures, Bonds, Commercial Paper, Floating Rate Bonds, Zero Coupon Bonds, Inter-Corporate Deposits
	Banks	Certificates of Deposits, Debentures, Bonds
	Financial Institutions	Certificates of Deposits, Bonds

The G-secs are referred to as SLR securities in the Indian markets as they are eligible securities for the maintenance of the SLR ratio by the banks. The other non-Govt securities are called Non-SLR securities.

7. **What is the importance of the Debt Market to the economy?**

The key role of the debt markets in the Indian Economy stems from the following reasons:

- Efficient mobilization and allocation of resources in the economy
- Financing the development activities of the Government
- Transmitting signals for the implementation of the monetary policy
- Facilitating liquidity management in tune with overall short term and long term objectives

Since the Government Securities are issued to meet the short term and long term financial needs of the government, they are not only used as instruments for raising debt, but have also emerged as key instruments for internal debt management, monetary management and short term liquidity management.

The returns earned on the government securities are normally taken as the benchmark rates of returns and are referred to as the risk free return in financial theory. The Risk Free rate obtained from the G-sec. rates is often used to price the other non-govt. securities in the financial markets.

8. **What are the benefits of an efficient Debt Market to the financial system and the economy?**

- Reduction in the borrowing cost of the Government and easy mobilization of resources at a reasonable cost
- Provides greater funding avenues to public-sector and private sector projects, and reduces the pressure on institutional financing
- Enhanced mobilization of resources by unlocking illiquid retail investments like gold
- Development of heterogeneity among market participants
- Assistance in the development of a reliable yield curve and the term structure of interest rates.

9. **What are the different types of risks with regard to debt securities?**

The following are the risks associated with debt securities:

- Default Risk: This can be defined as the risk when an issuer of a bond may be unable to make timely payment of interest or principal on a debt security, or to otherwise comply with the provisions of a bond indenture; and is also referred to as credit risk.
- Interest Rate Risk: This can be defined as the risk emerging from an adverse change in the interest rate prevalent in the market so as to affect the yield on the existing instruments. A good case would be an upswing in the prevailing interest rate scenario leading to a situation where the investors' money is locked at lower rates, whereas if he had waited and

invested in the changed interest rate scenario, he would have earned more.

- Reinvestment Rate Risk: This can be defined as the probability of a fall in the interest rate resulting in a lack of options to invest the interest received at regular intervals at higher rates than the comparable rates in the market.

The following are the risks associated with trading in debt securities:

- Counter Party Risk: This is the normal risk associated with any transaction and refers to the failure or inability of the opposite party to deliver either the promised security or the sale-value at the time of settlement as per the contract.
- Price Risk: This refers to the possibility of not being able to receive the expected price on any order due to adverse movement in the prices.

MARKET STRUCTURE

10 What is the trading structure in the Wholesale Debt Market?

The Debt Markets in India and all around the world are dominated by Government Securities, which account for between 50 - 75% of the trading volumes and the market capitalization in all markets. Government Securities (G-Secs) account for 70 - 75% of the outstanding value of issued securities and 90-95% of the trading volumes in the Indian Debt Markets. State Government securities & Treasury Bills account for around 3-4 % of the daily trading volumes. The trading activity in the G-Sec. Market is also very concentrated currently (in terms of liquidity of the outstanding G-Secs.) in the top 10 liquid securities, accounting for around 70% of the daily volume.

11 Who are the main investors of Govt. Securities in India?

Traditionally, the banks have been the largest category of investors in G-secs accounting for more than 60% of the transactions in the Wholesale Debt Market.

The banks are a prime and captive investor base for G-secs as they are normally required to maintain 25% of their net time and demand liabilities as SLR, But it has been observed that the banks normally invest 10% to 15% more than the normal requirement in Government Securities because of the following requirements:-

- Risk Free nature of the Government Securities
- Greater returns in G-Secs as compared to other investments of comparable nature

12 Who regulates the fixed income markets?

The issue and trading of fixed income securities by each of these entities are regulated by different bodies in India. For example: Government Securities and issues by Banks and Institutions are regulated by the RBI. The issue of non-government securities comprising basically of Corporate Debt issues is regulated by SEBI.

13 What are the main features of G-Secs and T-Bills in India?

All G-Secs. in India currently have a face value of Rs.100/- and are issued by the RBI on behalf of the Government of India. All G-Secs are normally coupon-bearing (Interest rate) bearing and have semi-annual coupon or interest payments with tenure of 5 to 30 years. This may change according to the structure of the Instrument.

Example: A 11.50% GOI 2014 security will carry a coupon rate(Interest Rate) of 11.50% p.a. on a face value per unit of Rs.100/- payable semi-annually and maturing in the year 2014.

Treasury Bills are for short-term instruments issued by the RBI for the Govt. to finance the temporary funding requirements and are issued with maturities of 91 Days and 364 Days. T-Bills have a face value of Rs.100 but have no coupon (no interest payment). T-Bills are instead issued at a discount to the face value (say @ Rs.95) and redeemed at par (Rs.100). The difference of Rs. 5 (100 - 95) represents the return to the investor obtained at the end of the maturity period.

State Government Securities are also issued by the RBI on behalf of each of the state governments and are coupon-bearing bonds with a face value of Rs.100 and a fixed tenure. They account for 3-4 % of the daily trading volumes.

14 What are the segments in the secondary debt market?

The segments in the secondary debt market based on the characteristics of the investors and the structure of the market are:

- Wholesale Debt Market - Where the investors are mostly Banks, Financial Institutions, the RBI, Primary Dealers, Insurance companies, MFs, Corporates and FIIs.
- Retail Debt Market involving participation by individual investors, provident funds, pension funds, private trusts, NBFCs and other legal entities in addition to the wholesale investor classes.

15 What is the structure of the Wholesale Debt Market?

The Debt Market is today in the nature of a negotiated deal market where most of the deals take place through telephones and are reported to the Exchange for confirmation. It is therefore in the nature of a wholesale market.

16 Who are the most prominent investors in the Wholesale Debt Market in India?

The Commercial Banks and the Financial Institutions are the most prominent participants in the Wholesale Debt Market in India.

During the past few years, the investor base has been widened to include Co-operative Banks, Investment Institutions, cash rich corporates, Non-Banking Finance companies, Mutual Funds and high net-worth individuals. FIIs have also been permitted to invest 100% of their funds in the debt market, which is a significant increase from the earlier limit of 30%. The government also allowed in 1998-99 the FIIs to invest in T-bills with a view towards broadbasing the investor base of the same.

17 What is the issuance process of G-secs.?

G-secs. are issued by the RBI on either a yield-based (participants, bid for the coupon payable) or a price-based (participants bid a price for a bond with a fixed coupon) auction basis. The Auction can be either a Multiple price (participants get allotments at their quoted prices/yields) or a Uniform price Auction (all participants get allotments at the same price).

The RBI has recently announced a non-competitive bidding facility for retail investors in G-Secs. through which non-competitive bids will be allowed up to 5 percent of the notified amount in the specified auctions of dated securities.

18 What are the types of trades in the Wholesale Debt Market?

There are normally two types of transactions, which are executed in the Wholesale Debt Market :

- An outright sale or purchase, and
- A Repo trade

19 What is a Repo trade and how is it different from a normal buy or sell transaction?

An outright Buy or sell transaction is the one where there is no intended reversal of the trade at the point of execution of the trade. The buy or sell transaction is an independent trade and is in no way connected with any other trade at the same or a later point of time.

A Ready Forward Trade (which is normally referred to as a Repo trade or a Repurchase Agreement) is a transaction where the said trade is intended to be reversed at a later point of time at a rate which will include the interest component for the period between the two opposite legs of the transactions.

So, in such a transaction, one participant sells securities to the other with an agreement to purchase them back at a later date. The trade is called a Repo transaction from the point of view of the seller and a Reverse Repo transaction from point of view of the buyer.

Repo, therefore, facilitate creation of liquidity by permitting the seller to avail of a specific sum of money (the value of the repo trade) for a certain period in lieu of payment of interest by way of the difference between the two prices of the two trades.

Repos and reverse repos are commonly used in the money markets as instruments of short-term liquidity management and can also be termed as a collateralised lending and borrowing mechanism. Banks and Financial Institutions usually enter into reverse repo transactions to manage their reserve requirements or to manage liquidity.

BOND ANALYTICS

20 What is Yield?

Yield refers to the percentage rate of return paid on a stock in the form of dividends, or the effective rate of interest paid on a bond or note. There are many different kinds of yields depending on the investment scenario and the characteristics of the investment.

Yield To Maturity (YTM) is the most popular measure of yield in the Debt Markets, and is the percentage rate of return paid on a bond, note or other fixed income security, if you buy and hold the security till its maturity date.

Current Yield is the coupon divided by the Market Price and it gives a fair approximation of the present yield.

Therefore, Current Yield = Coupon of the Security(in %) x Face Value of the Security (viz. 100 in case of G-Secs.)/Market Price of the Security.

Eg: Suppose the market price for a 10.18% G-Sec 2012 is Rs.120. The current yield on the security will be (0.1018 x 100)/120 = 8.48%

The yield on the government securities is influenced by various factors, such as level of money supply in the economy, inflation, future interest rate expectations, borrowing program of the government and the monetary policy followed by the government.

21 How is the Yield to Maturity computed?

The calculation for YTM is based on the coupon rate, length of time to maturity, and market price. It is the Internal Rate of Return on the bond and can be determined by equating the sum of the cash-flows throughout the life of the bond to zero. A critical assumption underlying the YTM is that the coupon interest paid over the life of the bond is assumed to be reinvested at the same rate.

The YTM is basically obtained through a trial and error method by determining the value of the entire range of cash-flows for the possible range of YTMs so as to find one rate at which the cash-flows sum up to zero.

So, say, a G-Sec - 8.00% GOI Loan 2014 with only 2 cash flows remaining to maturity as under:

Maturity Date: 30th January 2014

Interest Payment Dates: 30th January, 30th July and trading currently at Rs. 115 for 1 Unit, will have a YTM as follows:

Settlement Date: 17th March 2013 (Date at which ownership is transferred to the Buyer)

Frequency of Interest Payments: 2 Day Count Convention: 30/360 (which in MS-EXCEL is taken as Basis 4)
Yield To Maturity: 4.8626%
The same can be computed from MS-EXCEL through the YIELD Formula by input of the parameters given above. It can be checked by discounting the said cash-flows, i.e., the two coupons of Rs. 8.00 each and the principal repayment of Rs.100/- from the interest payment dates and maturity dates to the date of settlement.

22 How the price is determined in the Debt Markets?

The price of a bond in the Debt Markets is determined by the forces of demand and supply, as is the case in any market. The price of a bond in the marketplace also depends on a number of other factors and fluctuates according to changes in

- Economic conditions
- General money market conditions including the state of money supply in the economy
- Interest rates prevalent in the market and the rates of new issues
- Future Interest Rate Expectations
- Credit quality of the issuer

There is, however, a theoretical underpinning to the determination of the price of the bond in the market based on the measure of the yield of the security.

23 How is Yield related to the price?

Yields and Bond Prices are inversely related. So a rise in price will decrease the yield and a fall in the bond price will increase the yield.
There will be an immediate and mostly predictable effect on the prices of bonds with every change in the level of interest rates.(The predictability here however refers to the direction of the price change rather than the quantum of the change)
When the prevailing interest rates in the market rise, the prices of outstanding bonds will fall to equate the yield of older bonds with higher-interest rates of new issues. This will happen as there will be very few takers for the lower coupon bonds resulting in a fall in their prices. The prices would fall to an extent where the same yield is obtained on the older bonds as is available for the newer bonds.
When the prevailing interest rates in the market fall, there is an opposite effect. The prices of outstanding bonds will rise, until the yield of older bonds is low enough to match the lower interest rate on the new bond issues.
These fluctuations ensure that the value of a bond will never be the same throughout the life of the bond and is likely to be higher or lower than its original face value depending on the market interest-rate, the time of maturity (or call as the case may be), and the coupon rate on the bond.

MARKET STRUCTURE AND TRADING METHODOLOGY IN WDS

24 What is the concept of the broken period interest as regards the Debt Market?

The concept of the Broken period interest or the accrued interest arises as interest on bonds are received after certain fixed intervals of time to the holder, who enjoys the ownership of the security, at that point of time. Therefore, an investor who has sold a bond which makes half-yearly interest payments three months after the previous interest payment date would not receive the interest due to him for these three months from the issuer. The interest on these previous three months would be received by the buyer who has held it for the next three months only but received interest for the entire six month period, as he happens to be holding the security at the interest payment date.

Therefore, in case of a transaction in bonds occurring between two interest payment dates, the buyer would pay interest to the seller for the period from the last interest payment date up to the date of the transaction. The interest thus calculated would include the previous date of interest payment, but would not include the trade date.

25 What are the conventions followed for the calculation of Accrued Interest?

The Day Count Convention to be followed for the calculation of Accrued Intetest in case of transactions in G-Secs. is 30/360, i.e, each month is to be taken as having 30 days and each year is to be taken as having 360 days, irrespective of the actual number of days in the month. So, months like February, March, January, May, July, August, October and December are to be taken as having 30 days.

26 What is the Clean Price and the Dirty Price in reference to trading in G-Secs?

G-Secs. are traded on a clean price (Trade price), but settled on the dirty price (Trade price + Accrued Interest). This happens, as the coupon payments are not discounted in the price, as is the case in the other non-govt. debt instruments.

27 How are the Face Value, Trade Value and the settlement value different from one another?

The Cumulative face Value of the securities in a transaction is the face Value of the Transaction, and is normally the identifiable feature of each transaction. Say, a transaction of Rs.500,000 worth of G-Secs will comprise a trade of 5000 G-Secs. of Rs.100 each. The Trade value is the cumulative price of the traded G-Secs (i.e. no. of securities multiplied by the price) Say, the G-Secs referred to above may be traded at Rs.102 each so that the Trade Value is Rs.5,10,000 (102 x 5000). The Settlement value will be the trade value plus the Accrued Interest. The Accrued Interest per unit of the Bond is calculated as = Coupon of Bond x Face Value of the G-Sec. (100) x (No. of Days from Interest Payment Date to Settlement Date)/360.

In computing the number of days between the Interest Payment Date and the Settlement Date of the trade, only one of the two days is to be included.

28 How can investors in India hold G-Secs.?

G-Secs. can be held in either of the following forms:

- Physical Security (which is mostly outdated and not used much)
- SGL (Subsidiary General Ledger) A/c with the Public Debt Office of the RBI. The SGL A/cs are, however, restricted only to few entities like the Banks & Institutions.
- Constituent SGL A/c with Banks or PDs who hold the G-secs on behalf of the investors in their SGL-II A/cs of the RBI, are meant only for client holdings.
- Same Demat A/c as is used for equities at the Depositories. NSDL and CDSL will hold them in their SGL-II A/cs of the RBI, meant only for client holdings.

29 What are the types of transactions which take place in the market?

The following two types of transactions take place in the Indian markets:

- Direct transactions between banks and other wholesale market participants which account for around 25% of the Wholesale Market volumes: Here the Banks and the Institutions trade directly between themselves either through the telephone or the NDS system of the RBI.
- Broker intermediated transactions which account for around 70-75% of the trades in the market. These brokers need to be members of a Recognized Stock Exchange for the RBI to allow the Banks, Primary Dealers and Institutions to undertake dealings through them.

30 What is the role of the Exchanges in the WDS?

BSE and other Exchanges offer order-driven screen based trading facilities for Govt. Securities. The trading activity on the systems is, however, restricted with most trades today being put through in the brokers' offices and reported to the Exchange through their electronic systems which provide for reporting of "Negotiated Deals" and "Cross Deals".

BSE WHOLESALE DEBT SEGMENT (WDS)

31 When was the BSE accorded regulatory permission for the WDS?

The Reserve Bank of India, vide it's circular DBOD.FSC.BC.No.39/24.76.002/2000 dated October 25, 2000 permitted the Banks and the Financial Institutions in India to undertake transactions in debt instruments among themselves or with non-bank clients through the members of BSE Ltd. (BSE). This notification paved the way for the Exchange to commence trading in Government Securities and other fixed income instruments.

32 How is the settlement carried out in the Wholesale Debt Market?

The settlement for the various trades is finally carried out through the Clearing Corporation of India.

As far as the Broker Intermediated transactions are concerned, the settlement responsibility for the trades in the wholesale market is primarily on the clients, i.e. the market participants and the broker have no role to play in the same. The member only has to report the settlement details to the Exchange itself for monitoring purposes. The Exchange reports the trades to the RBI regularly and monitors the settlement of these trades.

33 What are the trading and reporting facilities offered by the BSE Wholesale Debt Segment?

The BSE Wholesale Debt Segment offers reporting facilities through the ICDM System, a brower based system, which is an efficient and reliable reporting system for all the debt instruments of different types and maturities, including Central and State Govt. Securities, T-Bills, Institutional Bonds, PSU Bonds, Commercial Paper, Certificates of Deposit, Corporate Debt instruments, and the new innovative instruments, Repos.

34 What are the three modules in the ICDM G-Sec system?

The system permits trading in the Wholesale Debt Market through the two following avenues:

- Negotiated Deal Module - which permits the reporting of trades undertaken by the market participants through the members of the Exchange
- Cross Deal Module - permitting reporting of trades undertaken by two different market participants through a single member of the Exchange

35 What is the membership criteria and charges for the membership of the BSE Wholesale Debt Segment?

The membership of the Debt Market Segment is being granted only to the Existing Members of the Exchange. The members need to have a minimum net worth of Rs.30 lacs for admission to undertaking dealings on the debt segment. No security deposit is applicable for the membership of the Debt Segment as on other Exchanges. The annual approval/renewal charges at present Rs.25,000/- have been waived off at present.

36. What is the settlement mode allowed in GILT?

The settlements mode allowed in GILT is on T+1 basis, as mandated by the Reserve Bank of India.

37 What are the aspects for settlement of trades in G-secs. in GILT?

The settlement for the securities traded in the Debt Segment would be on a Trade by Trade DVP basis. The primary responsibility of settling trades concluded in the wholesale segment rests directly with the participants who would settle the trades executed in the GILT system on their behalf through the Subsidiary Ledger Account of the RBI. Each transaction is settled individually, and netting of transaction is not allowed. The Exchange would monitor the Clearing and Settlement process for all the trades executed or reported through the 'GILT' system. The Members need to report the settlement details to the Exchange for all the trades undertaken by them on the GILT system.

CORPORATE DEBT MARKET

38 What is the structure of the Corporate Debt Market in India?

The Indian Primary market in Corporate Debt is basically a private placement market with most of the corporate bond issues being privately placed among the wholesale investors, i.e., the Banks, Financial Institutions, Mutual Funds, Large Corporates & other large investors. The proportion of public issues in the total quantum of debt capital issued annually has decreased in the last few years.

The Secondary Market for Corporate Debt can be accessed through the electronic order-matching platform offered by the Exchanges. BSE offers trading in Corporate Debt Securities through the automatic BOLT system of the Exchange. The Debt Instruments issued by Development Financial Institutions, Public Sector Units and the debentures, and other debt securities issued by public limited companies are listed in the 'F Group' at BSE.

39 What are the various kinds of debt instruments available in the Corporate Debt Market?

The following are some of the different types of corporate debt securities issued:

- Non-Convertible Debentures
- Partly-Convertible Debentures/Fully-Convertible Debentures (convertible into Equity Shares)
- Secured Premium Notes
- Debentures with Warrants
- Deep Discount Bonds
- PSU Bonds/Tax-Free Bonds

40 How is the trading, clearing, and settlement in Corporate Debt carried out at BSE?

The trading in corporate debt securities in the F Group is done on the BOLT order-matching system based on price-time priority. The trades in the 'F Group' at BSE are to be settled on a rolling settlement basis with a T+2 Cycle, with effect from 1st April 2003. Trading continues from Monday to Friday during the week. The Trade Guarantee Fund (TGF) of the Exchange covers all the trades in the 'F' Group undertaken on the electronic BOLT system of the Exchange.

BSE RETAIL DEBT SEGMENT (REDS)

41 What are the securities/instruments traded in the Retail Debt Segment (REDS) at the Exchange?

The Retail trading in Central Government Securities commenced on January 16, 2003, through the BOLT System of the Exchange. Central Government Securities (G-Secs.) are currently listed at the Exchange under the G Group. The Exchange may introduce, in due course of time, retail trading in other debt securities, like the following, subject to the receipt of regulatory approval for the same:

- State Government Securities
- Treasury Bills
- STRIPS
- Interest Rate Derivative products

42 Which are the participants in the Retail Debt Market?

The following are the main investor segments which could participate in the Retail Debt Market:

- Mutual Funds
- Provident Funds
- Individual Investors
- Pension Funds
- Private Trusts
- Religious Trusts and charitable organizations having large investible corpus
- State Level and District Level Co-operative Banks
- Housing Finance Companies
- NBFCs and RNBCs
- Corporate Treasuries
- Hindu-Undivided Families (HUFs)

43 What is the membership criteria and procedure at the BSE Retail Debt Segment (REDS)?

Eligibility Criteria for Members: The Members of the Segment possessing a net-worth of Rs. 1 crore and above are eligible to trade in the Retail Debt segment. The members are required to submit additional contribution of Rs. 5 lakhs as refundable contribution towards the separate Trade Guarantee Fund for this Segment. This contribution of Rs.5 lakhs towards the Trade Guarantee Fund can be submitted in terms of cash or FDR or Bank Guarantee. However, the Exchange has permitted the Members to earmark Rs.5 lakhs from their additional capital for a period of one month, or till the time they provide separate contribution for TGF,whichever is earlier.

44 How are the Retail Transactions in G-Secs. executed at the Exchange?

Retail Trading in Government Securities takes place by electronic order matching based on price-time priority through the BOLT (BSE OnLine Trading) System of the Exchange with the continuous trading sessions from 9.55 a.m. to 3.30 p.m, as is operational in the Equities Segment. The Retail Trading in G-secs. is to be settled on a rolling settlement basis with a T+2 Delivery Cycle with effect from 1st April 2003.

45 What is the listing procedure for G-Secs. in respect of the Retail Debt Market?

- Eligible Securities: All outstanding and newly issued Central Government Securities are eligible to be traded on the automated, anonymous , order driven system of the eligible stock exchange. The Rules, Bye-Laws and Regulations of the Exchange provide for the trading in Government securities as all G-secs. are deemed to be admitted to dealings on the Exchange from the date on which they are issued, as per Bye-Law 22(a) and 22(b) of the Exchange.
- Group: The Government securities have been introduced as a new group of securities - "G" Group in the BOLT system. The G-secs. are allotted a 6-digit scrip code (in the 800000 series) and a 11 characters alpha-numeric scrip ID.

  The interpretation for the Scrip IDs of G-Secs. in BOLT is as follows:

  - First 2 characters signify Central Government Security - CG
  - Next 4 Digits signify the coupon or interest rate of the G-Sec
  - Next 1 character is a differentiator which would be 'S' in case of a normal security and 'A' in case there exists another security with the same coupon and maturity year
  - Next 2 Digits signify the Issue Year and the last 2 digits signify the Maturity Year

  The date in the Scrip Name stands for the Maturity Date of the Security. The Exchange will implement and monitor the suspension of trading during the shut down period so that no settlements fall due in the no-delivery period which is on the T-3, T-2 and T-1 days for Government Securities (where T is the interest payment date for the security).

46 What is the trading methodology in case of the Retail trading in G-Secs.?

- Trading Methodology: The G-Secs. shall be traded on the system and settled at the same price, which will be inclusive of the accrued interest, i.e., the Dirty Price as per the market parlance in the Wholesale Debt Market. This is similar to the trading on the cum-interest price as is witnessed in the case of corporate debentures. The minimum order size shall be 10 units of G-Secs. with a face value of Rs.100/- each, equivalent to an order value of Rs. 1000/-, and the subsequent orders will be in lots of 10 securities each.

- Trading & Exposure Limits: The members of the Retail Debt Segment are permitted gross exposure in government securities along their gross exposure in equity segment upto 15 times of their additional capital deposited by them with the Exchange. However, no gross exposure is permitted to the members against their Base Minimum Capital + contribution of Rs.10 lakhs towards TGF in the cash segment. Transactions done by the members in this segment along with their transactions in the equity segment would form part of their Intra-day Trading Limits and are subject to a limit of 33.33 times of the capital deposited with the Exchange. However, institutional business would not form part of these Intra-Day and Gross Exposure limits.

47 How does the Clearing & Settlement of the Retail G-Sec. transactions take place in REDS?

The Clearing and Settlement mechanism for the Retail trading in G-Secs is based on the existing institutional mechanism available at the Stock Exchanges for the Equity Markets. The trades executed throughout the continuous trading sessions will be netted out at the end of the trading hours through a process of multilateral netting. The transactions will be netted out member-wise and then scrip-wise so as to determine the net settlement and payment obligations of the members.

The Delivery obligations and the payment orders in respect of these members are generated by the Clearing and Settlement system of the Exchange. These statements indicate the pay-in and pay-out positions of the members for securities and funds, who would then give the necessary instructions to their Clearing Banks and depositories.

Custodial confirmation of the retail trades in G-Secs. by using 6A-7A mechanism as available in the Equity segment is also available. The schedule of various settlement related activities, like obligation download, custodial confirmation, pay-in/pay-out of funds and securities is similar to what is at present applicable in the equities segment. As per an RBI Circular, the RBI regulated entities are to settle their transactions in the Retail Debt Segment at the Exchange through a Custodian.

48 How are the security delivery shortages treated in the Retail Debt Segment?

In the event of failure/shortage in delivery of securities, the Exchange would close-out such shortages at the ZCYC valuation for prices plus a 5% penalty factor which would be debited to the account of the member who has failed to deliver the securities against his sale obligation. The buyer in the event of non-delivery of securities by the seller would be eligible to receive the compensation/consideration which would be computed at the higher of either the highest trade price from the trade date to the date of closeout, or closing price of the security in the normal market on the closeout date, plus interest calculated at the rate of overnight FIMMDA-NSE MIBOR for the close-out date. The difference between the amount debited to the seller and amount payable to the buyer on the basis discussed above would be credited to the Investor Protection Fund of the Exchange.

The Exchange has also set up a separate Trade Guarantee Fund (Settlement Guarantee Fund) for the Retail Trading in G-Secs, as was mandated by SEBI through its circular.

49 How is the margining structure at the Exchange for the Retail Debt Market?

- **Margining - Mark to Market :** The positions in the Retail Debt segment are marked to market until settlement, and mark to market margin on net outstanding position of the members is collected on all open net positions. The mark to market margin is calculated based on the prices derived from the Zero Coupon Yield Curve (ZCYC). This margin is to be collected on the T+1 day along with the margin on the outstanding positions in cash segment.
- **Margin exemption to Institutional business:** Institutional business (i.e., business done by members on behalf of Indian Financial Institutions, Foreign Institutional Investors, Scheduled Commercial Banks, Mutual Funds registered with SEBI) would be exempted from margin, as is applicable in the case of transactions in the equity segment since the institutions are required under the relevant regulations to transact only on the basis of giving and taking delivery. The members would, however, be required to mark client type 'FI' at the time of order entry for availing exemption from payment of margins, and also exclusion of such trades from Intra-day Trading and Gross Exposure Limits. Custodial trades on behalf of Provident Funds transacting through a SGL-II account (Constituent SGL a/c) would also be eligible for margin exemption.
- **Margin Exemption against delivery:** Margin exemption for early pay-in of securities in case of sale transactions as applicable for the equities segment would also be available for this segment.

INVESTOR SAFEGUARDS

50 What are the main points to be kept in mind by the investor while investing in the Debt Markets?

The main features which you need to check for any debt security is:

- Coupon (or the discount implied by the price as in the case of zero coupon bonds) and the frequency of interest payments. The securities can also be chosen in such a manner so that the interest payments coincide with any requirements of funds at that point time.
- Timing of Cash Flows - In case, the interest and redemption proceeds, at one single point or at different points of time, are planned to be used

for meeting certain planned expenses in the future.

- Information about the Issuer and the Credit Rating - It is essential to obtain enough information about the background, the business operations, the financial position, the use of the funds being collected and the future projections to satisfy oneself of the suitability of the investment. As per the regulations in force in the capital markets, it is essential for any corporate debt security to obtain a credit rating from any of the major credit rating agencies. A proper analysis of the background and the financials of the issuer of any non-govt. debt instrument, and especially the credit rating, would lend greater safety to your investments.
- Other Terms of particular Issue - It is also advisable to check on certain terms of the issue, like the use of the issue proceeds, the monitoring agency, the formation of trustees, the secured or unsecured nature of the bonds, the assets underlying the security, and the credit-worthiness of the organization.

Most of the said information is available from the prospectus of the said issue. Any required and relevant details can also be obtained on demand from the lead manager of the issue.

- Obtain all the relevant knowledge on the debt security like the coupon, maturity, interest payments, put and call options (if any), Yield To Maturity (at the particular price at which the trade is intended to be carried out), and the Duration of the Instrument.
- Check the Yield To Maturity (YTM) of the debt security with the YTMs of other comparable debt securities of the same class and features.
- Remember that the Yield and the Price are inversely related. So, you will be able to obtain a higher yield at a lower price.
- It is desirable to check on the liquidity of any corporate debt instrument before investing in it so as to ensure the availability of satisfactory exit options.
- The Debt Markets are suited for investors who seek decent returns over a longer time horizon with periodic cash flows. There is also a tax exemption for interest earned on G-Secs. up to Rs.3000/- under Section 80L of the Income Tax Act.

The investor should be well aware of the set of risks associated with the Debt Markets, like the default risk (non-receipt or delay in receipt of interest or principal), price risk, interest rate risk (risk of rates moving adversely after investment), settlement risk (or risk of non-delivery of securities and funds in the secondary market) and the reinvestment risk (interest payments fetching a lower return when reinvested).

Investors in the Debt Markets should follow a process of judicious investing after a careful study of the economic and money market conditions, various instruments available for investment, the desired returns and their compatibility with existing investment, opportunities, alternative modes available for investments and the relevant transaction cost.

51 What will be the future scenario of the Retail Debt Market in India?

The Retail Debt Market is set to grow tremendously in India with the broadening of the market participation and the availability of a wide range of debt securities for retail trading through the Exchanges.

The following are the trends, which will impact the Retail Debt Market in India in the near future:

- Expansion of the Retail Trading platform to enable trading in a wide range of government and non-government debt securities.
- Introduction of new instruments like STRIPS, G-Secs. with call and put options, securitised paper, etc.
- Development of the secondary market in Corporate Debt.
- Introduction of Interest Rate Derivatives based on a wide range of underlying in the Indian Debt and Money Markets.
- Development of the Secondary Repo Markets.

The BSE vision for the Indian Debt Market foresees the markets growing in leaps and bounds in the near future, soon attaining global standards of safety, efficiency and transparency. This will truly help the Indian capital markets to attain a place of pride among the leading capital markets of the world.

Information Courtesy : BSE The edge is efficiency