

A PROJECT REPORT ON
***“A STUDY ON INVESTOR PREFERENCE IN FIXED INCOME
SECURITIES”***

A Project Submitted to
University of Mumbai for Partial Completion of the Degree
of Bachelor in Commerce (Accounting and finance)

Under the Faculty of Commerce

By

‘ADITI ARUN CHAVAN’

T.Y.B.A.F (SEMESTER – VI)

PRN NO.:

Under the Guidance of

‘ASST. PROF. DR. KISHOR CHAUHAN’

JNAN VIKAS MANDAL’S

Mohanlal Raichand Mehta College of Commerce

Diwali Maa College of Science

Amritlal Raichand Mehta College of Arts

Dr. R.T. Doshi College of Computer Science

NAAC Re-Accredited Grade 'A+' (CGPA : 3.31) (3rd Cycle)

Sector-19, Airoli, Navi Mumbai, Maharashtra 400708



FEBRUARY, 2024

JNAN VIKAS MANDAL'S



Mohanlal Raichand Mehta College of Commerce

Diwali Maa College of Science

Amritlal Raichand Mehta College of Arts

Dr. R.T. Doshi College of Computer Science

NAAC Re-Accredited Grade 'A+' (CGPA : 3.31) (3rd Cycle)

Sector-19, Airoli, Navi Mumbai, Maharashtra 400708

CERTIFICATE

This is to certify that **MS.ADITI ARUN CHAVAN** has worked and duly completed his Project work for the degree of Bachelor in Commerce (Accounting and Finance) under the Faculty of Commerce in the subject of **Accounting and Finance** and his project is entitled, "**A STUDY ON INVESTOR PREFERENCE IN FIXED INCOME SECURITIES**". Under my supervision.

I further certify that the entire work has been done by the learner under my guidance and that no part of it has been submitted previously for any Degree or Diploma of any University.

It is his own work and fact reported by her personal finding and investigations.

Guiding Teacher,

ASST. PROF. DR. KISHOR CHAUHAN.

Date of submission:

DECLARATION

I the undersigned **MS. ADITI ARUN CHAVAN** here by, declare that the work embodied in this project work titled “**A STUDY ON INVESTOR PREFERENCE IN FIXED INCOME SECURITIES**”, forms my own contribution to the research work carried out by me under the guidance of **ASST. PROF. DR. KISHOR CHAUHAN** is a result of my own research work and has been previously submitted to any other University for any other Degree/ Diploma to this or any other University.

Wherever reference has been made to previous works of others, it has been clearly indicated as such and included in the bibliography.

I, here by further declare that all information of this document has been obtained and presented in accordance with academic rules and ethical conduct.

(ADITI ARUN CHAVAN)

Certified by:

ASST. PROF. DR. KISHOR CHAUHAN.

ACKNOWLEDGEMENT

To list who all have helped me is difficult because they are so numerous and the depth is so enormous.

I would like to acknowledge the following as being idealistic channels and fresh dimensions in the completion of this project.

I take this opportunity to thank the **University of Mumbai** for giving me chance to do this project.

I would like to thank my **I/C Principal, Dr.B.R.Deshpande Sir** for providing the necessary facilities required for completion of this project.

I take this opportunity to thank our **Coordinator** for their moral support and guidance.

I would also like to express my sincere gratitude towards my project guide **Asst. Prof. DR. Kishor Chauhan** whose guidance and care made the project successful.

I would like to thank my **College Library**, for having provided various reference books and magazines related to my project.

Lastly, I would like to thank each and every person who directly or indirectly helped me in the completion of the project especially **my Parents and Peers** who supported me throughout my project.

Executive Summary

Debt market refers to the financial market where investors buy and sell debt securities, mostly in the form of bonds. These markets are important source of funds, especially in a developing economy like India. India debt market is one of the largest in Asia.

Like all other countries, debt market in India is also considered a useful substitute to banking channels for finance. Debt market of India is regulated by RBI and SEBI collectively . Despite a plethora of measures adopted by the authorities over the last few years, India has been distinctly lagging behind other developed as well as emerging economies in developing its corporate debt market The market development for corporate bonds in India is likely to be a gradual process as experienced in other countries.

Debt market is further classified into capital market which include long term securities like bonds, debentures ,bank deposits etc and Money market which has short term instrument such commercial papers, certificate of deposits, company deposits etc.

With these many instruments Indian debt market offers wide spectrum of alternatives to diversify the funds . But before investing into these markets individuals need to examine various things such as cash constraints ,liquidity requirement, risk appetite etc. on the basis of which an investment universe need to be created ,according to which funds are to be diversified into different instrument..

Topics to be covered in this research

- Importance of debt market to the economy
- Study of different fixed income securities
- Risk and returns of various fixed income securities
- Factors affecting individuals capacity and preference of fixed income security

For the purpose of this research two method of data collection is used viz primary method and secondary method.

In primary method of data collection survey method is used for which questionnaire used as a tool for data collection from 100 respondents

In secondary method of data collection data is collected from various published sources such as research papers published on internet newspaper articles etc.

INDEX

<u>Srno</u>	<u>Particulars</u>	<u>Pg no.</u>
1	Introduction	7
2	Research Methodology 2.1 Types of fixed income security 2.2 Commercial paper 2.3 Certificate of deposit 2.4 Bank deposit 2.5 Evaluation of risk exposure	10
3	Review of literature	52
4	Data Analysis and Interpretation	57
5	Finding and Suggestions	87
6	Conclusion	89
7	Bibliography	92
8	Appendix	94

INTRODUCTION

Fixed income is an investment that returns a payment to you on a regular schedule. Fixed income security is an investment that pays regular payments in the form of interest, preferred dividend and coupon payment. The most common are pensions, bonds, and loans, savings account. Fixed income also includes certificates of deposit, money market funds, and leveraged instruments.

Judged by total market value, fixed-income securities constitute the most prevalent means of raising capital globally. A fixed-income security is an instrument that allows governments, companies, and other types of issuers to borrow money from investors. Any borrowing of money is debt. The promised payments on fixed-income securities are, in general, contractual (legal) obligations of the issuer to the investor. For companies, fixed-income securities contrast to common shares in not having ownership rights. Payments of interest and repayment of principal (amount borrowed) are a prior claim on the company's earnings and assets compared with the claim of common shareholders. Thus, a company's fixed-income securities have, in theory, lower risk than that company's common shares.

In portfolio management, fixed-income securities fulfill several important roles. They are a prime means by which investors—individual and institutional—can prepare to fund, with some degree of safety, known future obligations such as tuition payments or pension obligations. The correlations of fixed-income securities with common shares vary; but, adding fixed-income securities to portfolios including common shares is usually an effective way of obtaining diversification benefits.

The Bond Market in India, with the advent of liberalization, has been transformed completely. The opening up of the financial market at present has influenced several foreign investors holding up to 30% of the financials in the form of fixed income to invest in the bond market in India. The bond market in India presently has diversified to a large extent and that is a huge contributor to the stable growth of the economy. The bond market has immense potential today in raising funds to support the infrastructural development undertaken by the government and expansion plans of the companies

In India, as noticed above bonds are issued by both the Government as well as the private-sector entities, to raise money for a specific purpose. They are essentially interest-bearing debt certificates. Bonds are like a loan that carries an interest rate and must be repaid on a specified date. Government and large corporations issue bonds when their funding requirement cannot be met from any other source. These thus, play a major role in fundraising and development activities as the respective organisations could take money for specific purposes through this instrument. They have a specified maturity period upon completion of which the borrower (Government or Private Corporation) returns the money to the lender. The money will be returned along with the interest, specified at the time of issue.

The Indian bond market is mainly dominated by government bonds. Government bonds are considered highly secure and enjoy excellent liquidity. The trading volumes in the Indian bond market have increased tremendously over the last ten years and around two dozen entities dominate the market today.

Apart from bonds, there are a variety of instruments offered in the debt market such as Commercial Papers(CPs), certificates of deposits, Repo transactions, Treasury Bills, State Government Securities, STRIPS, Interest Rate Derivative products etc.

The biggest advantage of investing in the Indian debt market vis-a-vis other forms of investment is its assured returns. The returns that the market offer is almost risk-free (though there is always a certain amount of risks, however, the trend says that return is almost assured). The Safest amongst them being government securities. On the other hand, there are certain amounts of risks in the corporate, FI and PSU debt instruments. In such a situation the investors can take help from the credit rating agencies which rate those debt instruments. The interest in the instruments may vary depending upon the ratings. Another advantage of investing in the India debt market is its high liquidity. Banks offer easy loans to investors against government securities.

As there are several advantages of investing in the India debt market, it is not free of disadvantages. As the returns here are risk-free, those are not as high as the equities market at the same time. So, on one hand, you are getting assured returns, but on the other hand, you are getting way lesser return at the same time. Retail participation in the Indian market particularly the bond market is very less here, though it has

increased recently. There are also some issues of liquidity and price discovery as the retail debt market is not yet quite well developed.

India's bond market remains small compared with other major economies, the corporate bond market went through a series of credit events and the ensuing liquidity crisis over the past year. Presently, as the end of the year is approaching, the mood in financial markets is fretful. Around Rs 35,000 crore worth of redemptions or rollovers of bonds issued by non-banking financial companies (NBFC's) are due.

If India is to see rapid economic growth over the long term – which is an absolute economic necessity – the bond market will have to play a pivotal role as a funding source. The bond market in India has a crucial role to play in the development of the economy and the government is undertaking various measures to strengthen the market in India.

2. Research Methodology

This chapter furnishes the information on the fixed income securities in India. Research methodology is the systematic, theoretical analysis of the method applied to a field of study. It is a path through which the researcher needs to conduct their research. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. In short, it encompasses the concepts such as paradigm, theoretical model, phases and quantitative or qualitative techniques. It can also be defined as the analysis of the principles of methods, rules and postulates employed by a discipline. It is a systematic study of methods that are, can be, or have been applied within a discipline. It is the study or description of methods. It shows the path through which researchers formulate their problem and objective and present their result from the data obtained. This research includes both the combination of primary and secondary sources. The qualitative data supports quantitative data analysis and results.

Objective

- To study different types of fixed income securities
- To study factors influencing investors preference of securities
- To examine the risk involved in investing in such securities
- To compare the returns of different fixed income securities
- To understand the importance of debt market

Scope and Limitation of Study

Scope of the study

The scope of the study basically means all those things that will be covered in the research project. It defines clearly the extent of the content that will be covered by the means of the research in order to come to more logical conclusions and give conclusions and satisfactory answers to the research.

This research is based on the fixed income securities in India which includes all types of fixed income investment options for an investor and their preference which security they prefer. Moreover, which security is better for them.

+ **Limitations of the study**

- This study only pertains to the fixed income securities in India.
- “Fixed income securities’ is a wide topic so the time period available was not sufficient to study every security in detail.
- The data collected is through google forms and can be pertained to bias of the respondents.
- There is a limitation as the information as gathered only from 100 respondents.
- The data collected is from the respondents belong the central and south part of Mumbai.

3.1 Types of Fixed Income securities

There are four broad categories of fixed income investments. Short-term products return a low rate, but for a shorter duration .Long-term products pay a higher rate, but money is invested for years.

Short-term: The interest rates on these accounts are based on the fed funds rate, or equivalent Treasury bill rates of maximum 4 years. To gain a higher yield, individual investors shifted from short-term to longer-term investments. Businesses use short- term loans to cover the cash flow needed to pay for day-to-day operations.

- **Savings Accounts:** The bank pays you a fixed rate of interest, based on the fed funds rate. You can add or withdraw whenever you like.
- **Certificates of Deposit:** You must keep your money invested for an agreed-upon period to get the promised rate of return.
- **Money Market Funds:** These are mutual funds that invest in a variety of short-term investments. You get paid a fixed rate based on short-term securities. These included: Treasury bills, federal agency notes, and Eurodollar deposits. They also included repurchase agreements, certificates of deposit, and corporate commercial paper. They are also based on obligations of states, cities, or other types ofmunicipal agencies.
- **Short-term Bond Funds:** These mutual funds invest in one-year to four-year low-risk bonds. Most of their holdings are corporate bonds.

Long-Term: Long-term fixed income investments are called bonds. They are how organizations get substantial loans. Unlike loans, bonds can be bought or sold like any security. The most important fixed income security is a bond that promises to pay a series of interest payments in fixed amounts and to repay principal amount at the maturity.

When market rate increases the value of such bond decreases because the present value of a bonds promised cash flow decreases when a higher discount rate is used. Bond prices go down when stock prices go up. Bonds are lower return and lower risk than stocks. Investors buy them when they want to avoid risk.

Their rating is based on their relative probability of default, because investors prefer bonds with lower probability of default, bonds with low credit quality must offer investors higher yields to compensate for the greater probability of default.

Features:

- The issuer of the bond
- The maturity date of the bond
- The par value
- Coupon rate and frequency
- Currency in which payments would be made.

Fixed Income Derivatives: There are many financial derivatives that base their value on fixed income products. They have the most potential return because you invest less of your money. Sophisticated investors, companies, and financial firms use them to hedge against losses.

- **Options:** They give a buyer the right, but not the obligation, to trade a bond at a certain price on an agreed-upon future date. The right to buy a bond is called a call option. The right to sell a bond is the put option. They are traded on a regulated exchange.
- **Futures contracts:** They are like options, except they bind participants to execute the trade. They are traded on an exchange. They have contract prices set so each side of the contract has a value of a zero value at the initiation of the contract.

- **Forward contracts:** They are like futures contracts, except they are not traded on an exchange. Instead, they are traded Over the Counter, either between the two parties directly or through a bank. They are often much customized to the particular needs of the two parties. A forward contract can be used to eliminate uncertainty about the expected future price of an asset it plans to buy or sell at a later date.
- **Mortgage-backed securities:** They derive their value from bundles of home loans. Like a bond, they offer a rate of return based on the value of the underlying assets. A mortgage is a loan secured by the collateral of some specified real estate property that obliges the borrower to make a predetermined series of payments to the lender. The cash flow of a mortgage includes (1) interest, (2) scheduled principal payments, and (3) prepayments (any principal repaid in excess of the scheduled principal payment).
- **Collateralized debt obligations:** They base their value on auto loans and credit card debt. Sometimes they use bundles of corporate bonds for their value.
- **Asset-backed commercial paper :** Are one-year corporate bond packages. They are based on underlying commercial assets. These include real estate, corporate auto fleets, or other business property.
- **Interest rate swaps are contracts:** They allow bondholders to swap their future interest rate payments. These are between a holder of a fixed-interest bond and one holding a flexible-interest bond. They trade Over the Counter. Swaptions are options on an underlying interest rate swap. They are a derivative based on a derivative. They should only be used to speculate about interest rate movements.

Third-Party Fixed Income Payment Streams: Some fixed income streams don't depend on the value of an investment. Instead, the payment is guaranteed by a third party.

Social Security: Fixed payments available after a certain age. It's guaranteed by the federal government. It's managed by the Social Security Trust Fund.

Pensions: Fixed payments guaranteed by your employer, based on the number of years you worked and your salary. Companies, unions, and governments use pension funds to make sure there's enough to make the payments. As more workers retire, fewer companies are offering this benefit.

- **Fixed-Rate Annuities:** An insurance product that guarantees you a fixed payment over an agreed-upon period. These are increasing since fewer workers receive pension

Bonds

A bond is a debt instrument in which an investor loans money to an entity (typically corporate or government) which borrows the funds for a defined period of time at a variable or fixed interest rate. Bonds are used by companies, municipalities, states and sovereign governments to raise money to finance a variety of projects and activities. Owners of bonds are debt holders, or creditors, of the issuer

Types of bonds

- **Central Government bonds:**

These bonds are issued by the Central Government to raise funds. These bonds are issued by the RBI on behalf of the Government. The primary purpose of these bonds is to finance fiscal deficit and meet the shortfall of revenue in the Government budget. These bonds are the safest bonds to invest in, since they are backed by the Government and will be repaid on maturity.

- **State Government bonds:**

These bonds are issued by the State Government to meet their fiscal deficits. These bonds are listed on the stock exchange. These bonds are also backed by the Government, making them low risk investments.

- **Municipal and Local authority bonds:**

A municipal corporation or a local authority may raise finance to meet funding for specific goals such as constructing infrastructure, public water works etc. These bonds are also rated by credit rating agencies and it is best to go by the rating and past records before investing.

- **Corporate bonds:**

These are highly risky bonds since the maturity depends on the track record of the company. Before investing in such bonds, you must do a complete study into the company and its performance.

- **Public Sector bonds:**

These bonds are issued by highly rated public sector companies for meeting their growth and expansion needs. These bonds are relatively less risky since PSUs are under the Government. Generally, these bonds are issued by companies where the Central Government is the majority shareholder.

- **Tax free bonds:**

Companies such as the National Highways Association of India (NHAI), Indian Railways Finance Corporation, HUDCO, Rural Electrification Corporation (REC) issue these bonds. The interest earned on these bonds is completely tax free in the hands of the investor.

Types of bond markets:

- **Primary market:**

This is the market where the borrower approaches investors to raise capital. The issue price of the bonds and the coupon rate is fixed at the time of raising capital.

- **Secondary market:**

Most of the bonds are traded in the stock market. They can be sold depending on when the investor wishes to exit from the bond. However, it is to be noted that the price for the bonds depends on how close the bond is to interest payment. As the bond nears the interest payment date, the price goes up. The price and coupon rate of the bond move inversely i.e if the price goes up, the interest rate goes down. This is because the net return to the investor stays the same as when the bond was issued in the primary market. For example, if the bond is issued at Rs. 1,000 with a coupon rate of 8%, the interest will be Rs. 80. However, if the price goes up to Rs. 1,250, the interest rate goes down to 6.4%. However, the interest payment to the investor remains the same.

Features of bond

- Three important elements that an investor needs to know when investing in a fixed-income security are: (1) the bond's features, which determine its scheduled cash flows and thus the bondholder's expected and actual return; (2) the legal, regulatory, and tax considerations that apply to the contractual agreement between the issuer and the bondholders; and (3) the contingency provisions that may affect the bond's scheduled cash flows.
- The basic features of a bond include the issuer, maturity, par value (or principal), coupon rate and frequency, and currency denomination.
- Issuers of bonds include supranational organizations, sovereign governments, non-sovereign governments, quasi-government entities, and corporate issuers.
- Bondholders are exposed to credit risk and may use bond credit ratings to assess the credit quality of a bond.
- A bond's principal is the amount the issuer agrees to pay the bondholder when the bond matures.
- The coupon rate is the interest rate that the issuer agrees to pay to the bondholder each year. The coupon rate can be a fixed rate or a floating rate. Bonds may offer annual, semi-annual, quarterly, or monthly coupon payments depending on the type of bond and where the bond is issued.
- Bonds can be issued in any currency. Bonds such as dual-currency bonds and currency option bonds are connected to two currencies.
- The yield to maturity is the discount rate that equates the present value of the bond's future cash flows until maturity to its price. Yield to maturity can be considered an estimate of the market's expectation for the bond's return.
- A plain vanilla bond has a known cash flow pattern. It has a fixed maturity date and pays a fixed rate of interest over the bond's life.
- The bond indenture or trust deed is the legal contract that describes the form of the bond, the issuer's obligations, and the investor's rights. The indenture is usually held by a financial institution called a trustee, which performs various duties specified in the indenture.
- The issuer is identified in the indenture by its legal name and is obligated to make timely payments of interest and repayment of principal.

- For asset-backed securities, the legal obligation to repay bondholders often lies with a separate legal entity—that is, a bankruptcy-remote vehicle that uses the assets as guarantees to back a bond issue.
- How the issuer intends to service the debt and repay the principal should be described in the indenture. The source of repayment proceeds varies depending on the type of bond.
- Collateral backing is a way to alleviate credit risk. Secured bonds are backed by assets or financial guarantees pledged to ensure debt payment. Examples
- Of collateral-backed bonds include collateral trust bonds, equipment trust certificates, mortgage-backed securities, and covered bonds.
- Credit enhancement can be internal or external. Examples of internal credit enhancement include subordination, overcollateralization, and reserve accounts. A bank guarantee, a surety bond, a letter of credit, and a cash collateral account are examples of external credit enhancement.
- Bond covenants are legally enforceable rules that borrowers and lenders agree on at the time of a new bond issue. Affirmative covenants enumerate what issuers are required to do, whereas negative covenants enumerate what issuers are prohibited from doing.
- An important consideration for investors is where the bonds are issued and traded, because it affects the laws, regulation, and tax status that apply. Bonds issued in a particular country in local currency are domestic bonds if they are issued by entities incorporated in the country and foreign bonds if they are issued by entities incorporated in another country. Eurobonds are issued internationally, outside the jurisdiction of any single country and are subject to a lower level of listing, disclosure, and regulatory requirements than domestic or foreign bonds. Global bonds are issued in the Eurobond market and at least one domestic market at the same time.
- Although some bonds may offer special tax advantages, as a general rule, interest is taxed at the ordinary income tax rate. Some countries also implement a capital gains tax. There may be specific tax provisions for bonds issued at a discount or bought at a premium.

- An amortizing bond is a bond whose payment schedule requires periodic payment of interest and repayment of principal. This differs from a bullet bond, whose entire payment of principal occurs at maturity. The amortizing bond's outstanding principal amount is reduced to zero by the maturity date for a fully amortized bond, but a balloon payment is required at maturity to retire the bond's outstanding principal amount for a partially amortized bond.
- Sinking fund agreements provide another approach to the periodic retirement of principal, in which an amount of the bond's principal outstanding amount is usually repaid each year throughout the bond's life or after a specified date.
- A floating-rate note, or floater, is a bond whose coupon is set based on some reference rate plus a spread. FRNs can be floored, capped, or collared. An inverse FRN is a bond whose coupon has an inverse relationship to the reference rate.
- Other coupon payment structures include bonds with step-up coupons, which pay coupons that increase by specified amounts on specified dates; bonds with credit-linked coupons, which change when the issuer's credit rating changes; bonds with payment-in-kind coupons that allow the issuer to pay coupons with additional amounts of the bond issue rather than in cash; and bonds with deferred coupons, which pay no coupons in the early years following the issue but higher coupons thereafter.
- The payment structures for index-linked bonds vary considerably among countries. A common index-linked bond is an inflation-linked bond, or linker, whose coupon payments and/or principal repayments are linked to a price index. Index-linked payment structures include zero-coupon-indexed bonds, interest-indexed bonds, capital-indexed bonds, and indexed-annuity bonds.
- Common types of bonds with embedded options include callable bonds, puttable bonds, and convertible bonds. These options are "embedded" in the sense that there are provisions provided in the indenture that grant either the issuer or the bondholder certain rights affecting the disposal or redemption of the bond. They are not separately traded securities.
- Callable bonds give the issuer the right to buy bonds back prior to maturity, thereby raising the reinvestment risk for the bondholder. For this reason, callable bonds have to offer a higher yield and sell at a lower price than

otherwise similar non-callable bonds to compensate the bondholders for the value of the call option to the issuer.

- Puttable bonds give the bondholder the right to sell bonds back to the issuer prior to maturity. Puttable bonds offer a lower yield and sell at a higher price than otherwise similar non-puttable bonds to compensate the issuer for the value of the put option to the bondholders.
- A convertible bond gives the bondholder the right to convert the bond into common shares of the issuing company. Because this option favors the bondholder, convertible bonds offer a lower yield and sell at a higher price than otherwise similar non-convertible bonds.

Bond ratings

Credit ratings are

- Relative measures of default probability, not a guarantee against default: A credit rating does NOT indicate that payment of interest and principal is completely certain. There are definitive non-zero probabilities of default for any rating category including the highest, 'CRISIL AAA'. For example, if the default rate for a rating agency's 'AAA' category is 0.1% in three years, it indicates that out of 1000 'AAA' ratings that the agency has assigned in the past, ONE has defaulted on paying interest or principal within a period of three years of assigning the rating. The rating indicates that the rated instrument is less likely to default than instruments rated lower.
- Not a comment on the issuer's general performance, or potential price of its bonds or equity shares, or suitability to the investor: A credit rating is an opinion on an issuer's ability and willingness to honour its financial obligations on the rated debt instrument on time. The rating should not be construed as an opinion on the issuer's general performance. Neither is it an opinion on the likely future price of the rated bonds, nor on the potential value of the issuer's equity shares. A CRISIL rating is not a recommendation to buy, sell or hold a rated instrument; nor is it a comment on the market price or the suitability of a rated instrument for a particular investor. CRISIL's ratings are based on qualitative and quantitative analyses of information provided by

issuers or rated firms, or obtained from other sources considered reliable; they do not constitute audits of issuers or rated firms.

- Assigned to debt instruments alone and NOT to equity instruments: Typically, debt instruments such as nonconvertible debentures, partially convertible debentures, bonds, fixed deposits, commercial paper, bank loan facilities, short-term debt, and structured debentures, are rated. Firms issuing these instruments can also be rated on their capacity to service their debt obligations on time. A credit rating indicates the issuer's ability and willingness to pay interest and principal on time. The rating agency assigns ratings on the basis of its analysis of the business and financial risks associated with the rated firm, and of the firm's management.

One of the major credit rating company in India is CRISIL .

CRISIL assigns credit ratings under the following seven categories:

- **Long-term:** The term 'long-term instruments' includes bonds, debentures, other debt securities, bank loans and other fund-based facilities with an original maturity of more than one year. Long-term ratings are assigned on a 20-point scale, from 'CRISIL AAA' to 'CRISIL D.'
- **Short-term:** The term 'short-term instruments' refers to commercial paper, short-term debentures, certificates of deposit, inter-corporate deposits, working capital borrowings, and other fund-based and non-fund based facilities with an original maturity of one year or less. Short-term ratings are assigned on a 9- point scale, from 'CRISIL A1' to 'CRISIL A4' and 'CRISIL D' denoting default.
- **Dual Ratings:** CRISIL assigns dual ratings (i.e., ratings on both long-term and short-term scale) to debt instruments that have an original maturity of more than one year, and also have a put option exercisable within one year from the date of issue. The first component of the rating, i.e., the long-term rating, addresses the likelihood of timely payment of principal and interest over the life of the instrument. On the other hand, the rating on the short-term scale indicates the likelihood of timely payment on the instrument by the issuer if the put option is exercised. Example of dual rating: CRISIL AA+/ CRISIL A1+.

- **Structured obligation ratings (SO):** CRISIL assigns ratings to long- and short-term structured finance instruments by using a suffix 'SO'. SO ratings are assigned only to securitised or asset-backed transactions having credit enhancement/structure that leads to the instrument being bankruptcy remote from the issuer/originator. Instruments with an original maturity of more than one year are rated on the long-term scale, while instruments with an original maturity of one year or less are rated on the short-term scale. The structured finance rating categories range from 'CRISIL AAA (SO)' to 'CRISIL D (SO)' on the long-term scale and 'CRISIL A1 (SO)' to 'CRISIL D (SO)' on the short-term rating scale.
- **Credit enhancement (CE) ratings:** CRISIL assigns 'CE' suffix to ratings to long- and short-term instruments that are backed by explicit credit enhancement that is external (or from a third party, parent or group), but the rated instrument is not bankruptcy remote from the issuer/originator. Instruments with an original maturity of more than a year are rated on the long-term scale while those with an original maturity of a year or less are rated on the short-term scale. The CE rating categories range from 'CRISIL AAA (CE)' to 'CRISIL D (CE)' on the long-term scale and 'CRISIL A1 (CE)' to 'CRISIL D (CE)' on the short-term rating scale.
- **Fixed Deposit (FD):** CRISIL assigns ratings to the FD programmes of corporates, banks and financial institutions with the prefix, 'F'. FD ratings are assigned on a 14-point scale, from 'FAAA' to 'FD'
- **Financial strength ratings:** CRISIL assigns financial strength ratings to insurance companies on a scale ranging from 'AAA' to 'D'.
- **Corporate credit ratings:** CRISIL assigns corporate credit ratings to issuers on a scale ranging from 'CCR AAA' to 'CCR D' and 'CCR SD' (indicating selective default)

Box 3: CRISIL's rating scales

Long-Term Rating scale	Short-Term Rating scale	Structured Finance rating scale		Credit Enhancement Rating scale		Corporate Credit Ratings scale	Fixed Deposit Rating Scale	Financial Strength Rating scale
Symbol (Rating category)	Symbol (Rating category)	Long-Term SO Instruments (Rating category)	Short-Term SO Instruments (Rating category)	Long-Term CE Instruments (Rating category)	Short-Term CE Instruments (Rating category)	Symbol (Rating category)	Symbol (Rating category)	Symbol (Rating category)
CRISIL AAA	CRISIL A1	CRISIL AAA (SO)	CRISIL A1 (SO)	CRISIL AAA(CE)	CRISIL A1 (CE)	CCR AAA	FAAA	AAA
CRISIL AA	CRISIL A2	CRISIL AA (SO)	CRISIL A2 (SO)	CRISIL AA(CE)	CRISIL A2 (CE)	CCR AA	FAA	AA
CRISIL A	CRISIL A3	CRISIL A (SO)	CRISIL A3 (SO)	CRISIL A(CE)	CRISIL A3 (CE)	CCR A	FA	A
CRISIL BBB	CRISIL A4	CRISIL BBB (SO)	CRISIL A4 (SO)	CRISIL BBB(CE)	CRISIL A4 (CE)	CCR BBB	FB	BBB
CRISIL BB	CRISIL D	CRISIL BB (SO)	CRISIL D (SO)	CRISIL BB (CE)	CRISIL D (CE)	CCR BB	FC	BB
CRISIL B		CRISIL B (SO)		CRISIL B (CE)		CCR B	FD	B
CRISIL C		CRISIL C (SO)		CRISIL C (CE)		CCR C		C
CRISIL D		CRISIL D (SO)		CRISIL D (CE)		CCR D		D
						CCR SD		

Importance of Credit Ratings

Credit rating agencies play an important role in credit laws and regulations in the United States and a number of European countries. Moreover, rating agencies significantly affect global capital markets by providing an assessment of securities to investors. Credit ratings remain one of the essential sources of information regarding credit analysis and credit risk for investors.

Bond ratings are vital to altering investors to the quality and stability of the bond in question. These ratings consequently greatly influence interest rates, investment appetite, and bond pricing.

Higher rated bonds, known as investment grade bonds, are viewed as safer and more stable investments. Such offerings are tied to publicly-traded corporations and government entities that boast positive outlooks. Investment grade bonds contain “AAA” to “BBB-“ ratings from Standard and Poor's, and "Aaa" to "Baa3" ratings from Moody's. Investment grade bonds usually see bond yields increase as ratings decrease. U.S. Treasury bonds are the most common AAA rated bond securities.

Non-investment grade bonds (junk bonds) usually carry Standard and Poor's ratings of “BB+” to “D” ("Baa1" to "C" for Moody's). In some cases, bonds of this nature are

given “not rated” status. Although bonds carrying these ratings are deemed to be higher-risk investments, they nevertheless attract certain investors who are drawn to the high yields they offer. But some junk bonds are saddled with liquidity issues, and can feasibly default, leaving investors with nothing. A prime example of non-investment grade bond was that issued by Southwestern Energy Company, which Standard & Poor's assigned a "BB+" rating, reflecting its negative outlook.

Independent Rating Agencies Get Tripped Up In 2008 Downturn

Many Wall Street watchers believe that the independent bond rating agencies played a pivotal roll in contributing to the 2008 economic downturn. In fact, it came to light that during the lead-up to the crisis, rating agencies were bribed to provide falsely high bond ratings, thereby inflating their worth. One example of this fraudulent practice occurred in 2008, when Moody's downgraded 83% of \$869 billion in mortgage-backed securities, which were given a rating of "AAA" just the year before.

In short: long-term investors should carry the majority of their bond exposure in more reliable, income-producing bonds that carry investment grade bond ratings. Speculators and distressed investors who make a living off of high-risk, high-reward opportunities, should consider turning to non-investment grade bonds.

However, investors must not solely rely on the credit ratings provided by credit agencies. The global financial crisis in 2007-2008 proved that the close relationship between credit rating agencies and large financial institutions could cause conflicts of interest. For example, credit rating agencies gave the highest ratings to many mortgage-backed securities that, in reality, were close to the status of junk securities.

3.3 Commercial papers

According to Reserve Bank Commercial Paper Directions, 2017 ‘Commercial Paper’ (CP) is an unsecured money market instrument issued in the form of a promissory note. The original tenor of a CP shall be between seven days to one year.

These commercial papers are actively traded on NSE and BSE.

Eligible Issuers:

- Companies, including Non-Banking Finance Companies (NBFCs) and All India Financial Institutions (AIFIs), are eligible to issue CPs subject to the condition that any fund-based facility availed of from bank(s) and/or financial institutions is classified as a standard asset by all financing banks/institutions at the time of issue.
- Other entities like co-operative societies/unions, government entities, trusts, limited liability partnerships and any other body corporate having presence in India with a net worth of ₹ 100 crore or higher subject to the condition as specified in the above given point.
- Any other entity specifically permitted by the Reserve Bank of India (RBI).
- A CP shall be issued in minimum denomination of ₹ 5 lakh and multiples thereof.
- A CP shall be issued at a discount to face value.

Eligible Investors:

- All residents, and non-residents permitted to invest in CPs under Foreign Exchange Management Act (FEMA), 1999 are eligible to invest in CPs; however, no person can invest in CPs issued by related parties either in the primary or secondary market.
- Investment by regulated financial sector entities will be subject to such conditions as the concerned regulator may impose.

The table below captures the gist of some of CP trades on the NSE on 23rd march 2020 with the trade size and the implicit yield.

Settlement Date	ISIN	Descriptor	Trade Date	Quantity	Nominal Value	Weighted Average Price (Rs.)	Weighted Average Yield (%)
19-Mar-2020	INE245A14CS4	THE TATA POWER COMPANY LIMITED 180D CP 17JUN20	19-Mar-0020	4000	2000000000	98.32	6.95
19-Mar-2020	INE975F14RZ8	KOTAK MAHINDRA INVESTMENTS LIMITED 366D CP 03JUN20	19-Mar-0020	500	2500000000	98.47	7.46
19-Mar-2020	INE001A14WF6	HOUSING DEVELOPMENT FINANCE CORPORATION LTD 120D CP 15MAY20	19-Mar-0020	4500	2250000000	99.02	6.35
19-Mar-2020	INE018A14HL9	LARSEN AND TOUBRO LIMITED 48D CP 24MAR20	19-Mar-0020	8000	4000000000	99.92	6
19-Mar-2020	INE055A14HT4	CENTURY TEXTILES AND INDUSTRIES LIMITED 178D CP 20MAR20	19-Mar-0020	2000	1000000000	99.98	6.5
19-Mar-2020	INE289B14FW5	GIC HOUSING FINANCE LIMITED 64D CP 20MAR20	19-Mar-0020	500	2500000000	99.98	5.51
19-Mar-2020	INE870H14IV5	NETWORK18 MEDIA & INVESTMENTS LTD. 91D CP 20MAR20	19-Mar-0020	1000	5000000000	99.98	6.02
19-Mar-2020	INE001A14V00	HOUSING DEVELOPMENT FINANCE CORPORATION LTD 358D CP 10JUL20	19-Mar-0020	500	2500000000	97.51	8.25
19-Mar-2020	INE090L14201	BIRLA GROUP HOLDINGS PRIVATE LIMITED 133D CP 26MAR20	19-Mar-0020	500	2500000000	99.84	8.4
19-Mar-2020	INE261F14GA9	NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT 313D CP 08JUN20	19-Mar-0020	2500	1250000000	98.63	6.25
19-Mar-2020	INE261F14GK8	NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT 170D CP 31JUL20	19-Mar-0020	1000	5000000000	97.67	6.5
19-Mar-2020	INE403G14MB1	STANDARD CHARTERED INVESTMENTS AND LOANS (INDIA) LIMITED 176D CP 09JUN20	19-Mar-0020	1100	5500000000	98.27	7.82
19-Mar-2020	INE514E14OL5	EXPORT IMPORT BANK OF INDIA 121D CP 11JUN20	19-Mar-0020	1000	5000000000	98.59	6.2
19-Mar-2020	INE733E14658	NTPC LIMITED 91D CP 24MAR20	19-Mar-0020	4400	2200000000	99.92	5.5
19-Mar-2020	INE038A14262	HINDALCO INDUSTRIES LIMITED 29D CP 20MAR20	19-Mar-0020	4000	2000000000	99.99	5.29
19-Mar-2020	INE110L14MT4	RELIANCE JIO INFOCOMM LIMITED 101D CP 23MAR20	19-Mar-0020	3000	1500000000	99.93	6
19-Mar-2020	INE115A14BT9	LIC HOUSING FINANCE LIMITED 312D CP 24MAR20	19-Mar-0020	1000	5000000000	99.92	5.9
19-Mar-2020	INE155A14QW7	TATA MOTORS LIMITED 148D CP 26MAR20	19-Mar-0020	3000	1500000000	99.88	6.19
19-Mar-2020	INE901L14854	ALEMBIC PHARMACEUTICALS LIMITED 89D CP 22APR20	19-Mar-0020	200	1000000000	99.41	6.34
19-Mar-2020	INE660A14TY6	SUNDARAM FINANCE LIMITED 364D CP 20MAR20	19-Mar-0020	2000	1000000000	99.98	6.13

Till date 68 issuers have done 474 issuances of commercial papers and have successfully listed CPs of Rs 1,52,090 crore on BSE. The weighted average yield of these issuances is **6.12** per cent with an average tenor of 144 days (as on January 8 2020)(source: economic times an article dated 8th january 2020)

3.4 Certificate Of Deposit

Issuers

- Banks both national and foreign, along with financial institutions can issue such certificates. Please note that only scheduled commercial banks can issue CDs. Regional rural banks and local area banks do not have permission to issue CD. They issue CD in electronic form (dematerialise form) or as usance Promissory Note (paper certificate). However, for such an issue, they need to keep funds with eligible banks or financial institutions.

Investment criteria

- The RBI permits individuals, corporations, companies, banks, trusts, funds, associations to purchase a certificate of deposit. There are some limitations to NRIs (Non-Resident Indians). NRIs can subscribe to Indian certificate of deposits. However, they have permission to subscribe only on a non-repatriable basis. It means that the NRI holder of the CDs cannot endorse it to another NRI in the secondary market. As a single subscriber, one can invest in CDs for INR 1 lac and in multiples of INR 1 lac only.
- One can freely transfer oner CD by endorsing and delivering if it is in physical form. The trading mechanism in the demat form is similar to stocks holding in demat format. Further, there is also no lock-in period for holding a certificate of deposit. Both NSE and BSE facilitates trading in a certificate of deposits for retail investors.
- Banks can issue CDs for 7 days up to 1-year duration. While financial institutions can issue for 1 year and up to 3 years of maturity. Generally, all issuers need to maintain additional CRR and SLR on the issue price of the CDs. CRR stands for cash reserve ratio and SLR stands for statutory liquidity ratio. Both banks and financial institutions need to maintain CRR and SLR with RBI.

Data for - 19-Mar-2020						
ISIN	Descriptor	Trade Date	Quantity	Nominal Value	Weighted Average Price (Rs.)	Weighted Average Yield (%)
INE238A165Q3	AXIS BANK LIMITED CD 19AUG20	18-Mar-0020	2500	25,00,00,000.00	97.45	6.25
INE090A165V8	ICICI BANK LIMITED CD 31DEC20	19-Mar-0020	10000	1,00,00,00,000.00	94.89	6.85
INE238A161Q2	AXIS BANK LIMITED CD 26JUN20	19-Mar-0020	10500	1,05,00,00,000.00	98.27	6.50
INE238A165Q3	AXIS BANK LIMITED CD 19AUG20	19-Mar-0020	3000	30,00,00,000.00	97.17	6.95
INE238A169Q5	AXIS BANK LIMITED CD 24JUL20	19-Mar-0020	4500	45,00,00,000.00	97.61	7.03
INE261F16488	NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT CD 03FEB21	19-Mar-0020	2500	25,00,00,000.00	94.20	7.00
INE261F16504	NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT CD 18FEB21	19-Mar-0020	2500	25,00,00,000.00	93.95	7.00
INE261F16512	NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT CD 05MAR21	19-Mar-0020	2500	25,00,00,000.00	93.78	6.90
INE667A16GZ0	SYNDICATE BANK CD 12JUN20	19-Mar-0020	30000	3,00,00,00,000.00	98.85	4.99
INE028A16BU7	BANK OF BARODA CD 25NOV20	18-Mar-0020	17500	1,75,00,00,000.00	95.97	6.10
INE028A16BW3	BANK OF BARODA CD 05AUG20	18-Mar-0020	17500	1,75,00,00,000.00	97.77	6.00
INE028A16BY9	BANK OF BARODA CD 09MAR21	18-Mar-0020	5000	50,00,00,000.00	94.93	5.49
INE090A162V7	ICICI BANK LIMITED CD 17JUL20	18-Mar-0020	2500	25,00,00,000.00	98.10	5.90
INE556F16788	SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA CD 13JAN21	18-Mar-0020	10000	1,00,00,00,000.00	95.14	6.21
INE028A16B00	BANK OF BARODA CD 01JUN20	19-Mar-0020	2500	25,00,00,000.00	98.80	6.00
INE238A16657	AXIS BANK LIMITED CD 18DEC20	19-Mar-0020	10000	1,00,00,00,000.00	94.84	7.25
INE238A167R7	AXIS BANK LIMITED CD 13NOV20	19-Mar-0020	15000	1,50,00,00,000.00	95.47	7.25
INE261F16413	NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT CD 29MAY20	19-Mar-0020	2000	20,00,00,000.00	98.76	6.45
INE261F16421	NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT CD 12JUN20	19-Mar-0020	2500	25,00,00,000.00	98.52	6.45
INE556F16648	SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA CD 04JUN20	19-Mar-0020	2500	25,00,00,000.00	98.67	6.40
INE562A16JS2	INDIAN BANK CD 01JUN20	19-Mar-0020	5000	50,00,00,000.00	98.80	6.00
INE556F16598	SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA CD 03APR20	18-Mar-0020	7500	75,00,00,000.00	99.75	6.10
INE028A16BU7	BANK OF BARODA CD 25NOV20	19-Mar-0020	2500	25,00,00,000.00	95.71	6.52
INE028A16BZ6	BANK OF BARODA CD 15JUN20	19-Mar-0020	20000	2,00,00,00,000.00	98.79	5.07
INE084A16CC6	BANK OF INDIA CD 15JUN20	19-Mar-0020	15000	1,50,00,00,000.00	98.76	5.20
INE092T16NM5	IDFC FIRST BANK LIMITED CD 23AUG20	19-Mar-0020	5000	50,00,00,000.00	99.93	6.25

INE028A16BZ6	BANK OF BARODA CD 15JUN20	19-Mar-0020	20000	2,00,00,00,000.00	98.79	5.07
INE084A16CC6	BANK OF INDIA CD 15JUN20	19-Mar-0020	15000	1,50,00,00,000.00	98.76	5.20
INE092T16NM5	IDFC FIRST BANK LIMITED CD 23MAR20	19-Mar-0020	5000	50,00,00,000.00	99.93	6.25
INE238A161T6	AXIS BANK LIMITED CD 29DEC20	19-Mar-0020	5000	50,00,00,000.00	94.82	7.00
INE238A166R9	AXIS BANK LIMITED CD 12NOV20	19-Mar-0020	5000	50,00,00,000.00	95.63	7.00
INE238A167T3	AXIS BANK LIMITED CD 13JAN21	19-Mar-0020	65000	6,49,99,99,744.00	94.67	6.85
INE434A16QE9	ANDHRA BANK CD 27MAR20	19-Mar-0020	5000	50,00,00,000.00	99.88	5.50
INE556F16812	SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA CD 28JAN21	19-Mar-0020	5000	50,00,00,000.00	94.57	6.65
INE556F16838	SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA CD 12MAR21	19-Mar-0020	5000	50,00,00,000.00	93.83	6.70
INE238A167T3	AXIS BANK LIMITED CD 13JAN21	18-Mar-0020	10000	1,00,00,00,000.00	94.74	6.75
INE090A163U7	ICICI BANK LIMITED CD 20MAR20	19-Mar-0020	1000	10,00,00,000.00	99.98	5.51
INE090A169V2	ICICI BANK LIMITED CD 11DEC20	19-Mar-0020	6000	60,00,00,000.00	95.29	6.75
INE095A16A17	INDUSIND BANK LIMITED CD 20MAR20	19-Mar-0020	23000	2,30,00,00,000.00	99.98	5.51
INE160A16MB5	PUNJAB NATIONAL BANK CD 26MAR20	19-Mar-0020	200	2,00,00,000.00	99.89	5.56
INE238A168R5	AXIS BANK LIMITED CD 17NOV20	19-Mar-0020	5000	50,00,00,000.00	95.40	7.25
INE261F16397	NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT CD 23APR20	19-Mar-0020	930	9,30,00,000.00	99.40	6.32
INE434A16QI0	ANDHRA BANK CD 14MAY20	19-Mar-0020	5000	50,00,00,000.00	99.04	6.30
INE514E16BP8	EXPORT IMPORT BANK OF INDIA CD 02DEC20	19-Mar-0020	5000	50,00,00,000.00	95.32	6.95
INE556F16598	SMALL	19-Mar-0020	5000	50,00,00,000.00	99.73	6.50

3.5 Bank deposits

Primarily, banks offer two kinds of deposit accounts. These are demand deposits like current/saving account and term deposits like fixed or recurring deposits. When you open a deposit account in a bank, you become an account holder or a depositor.

Savings Account

It offers high liquidity and is very popular among the masses. They provide a lot of flexibility for deposits and withdrawal of funds from the account and also have cheque facility. The interest provided by Public sector bank is only 4%, however, some of the private banks like Yes Bank and Kotak Bank offers interest between 6-7%.

Recurring Deposit

It is a special type of term deposit where you do not need to deposit a lump sum savings rather a person has to deposit a fixed sum of money every month (which can be as low as Rs 100 per month). These accounts have maturities ranging from 6 months to 120 months. You can also give a standing order to the bank to withdraw a fixed sum of money from your saving account on every fixed date and the same is credited to RD account. However, the bank may charge some penalty for delay in paying the installments.

Current Account

It is a demand deposit and is meant for businessmen to conduct their business transactions smoothly. These are the most liquid deposits and there are no restrictions on the number and the number of transactions in a day. Moreover, banks do not pay any interest on these accounts.

Fixed deposit

It is an instrument offered by banks which gives a higher interest than a regular savings account and offers a wide range of tenures ranging from 7 days to 10 years. The rate of interest varies from bank to bank, usually, it lies between 6-10%. You may or may not have a separate bank account to open a fixed deposit with the bank. You may be charged some penalty in case of early closure of FD account. Wealth management is necessary in such cases.

Government Security (G-Sec)

Government Security (G-Sec) is a tradeable instrument issued by the Central Government or the State Governments. It acknowledges the Government's debt obligation. Such securities are short term (usually called treasury bills, with original maturities of less than one year) or long term (usually called Government bonds or dated securities with original maturity of one year or more). In India, the Central Government issues both, treasury bills and bonds or dated securities while the State Governments issue only bonds or dated securities, which are called the State Development Loans (SDLs). G-Secs carry practically no risk of default and, hence, are called risk-free gilt-edged instruments.

- **Treasury Bills (T-bills)** Treasury bills or T-bills, which are money market instruments, are short term debt instruments issued by the Government of India and are presently issued in three tenors, namely, 91 day, 182 day and 364 day. Treasury bills are zero coupon securities and pay no interest. Instead, they are issued at a discount and redeemed at the face value at maturity.
- **Cash Management Bills (CMBs)** In 2010, Government of India, in consultation with RBI introduced a new short-term instrument, known as Cash Management Bills (CMBs), to meet the temporary mismatches in the cash flow of the Government of India. The CMBs have the generic character of T-bills but are issued for maturities less than 91 days.
- **Dated G-Secs** Dated G-Secs are securities which carry a fixed or floating coupon (interest rate) which is paid on the face value, on half-yearly basis. Generally, the tenor of dated securities ranges from 5 years to 40 years.

Public Debt Office (PDO) of the Reserve Bank of India acts as registry / depository of G-Secs and deals with the issue, interest and repayment of principal at maturity. Most of the dated securities are fixed coupon securities.

The nomenclature of a typical dated fixed coupon G-Sec contains the following features - coupon, name of the issuer, maturity year. For example, - 7.17% GS 2028 would mean:

Coupon	: 7.17% paid on face value
Name of Issuer	: Government of India
Date of Issue	: January 8, 2018
Maturity	: January 8, 2028
Coupon Payment Dates	: Half-yearly (July 08 and January 08) every year
Minimum Amount of issue/ sale	: ₹10,000

In case, there are two securities with the same coupon and are maturing in the same year, then one of the securities will have the month attached as suffix in the nomenclature. eg. 6.05% GS 2019 FEB, would mean that G-Sec having coupon 6.05% that mature in February 2019 along with the other similar security having the same coupon. In this case, there is another paper viz. 6.05%GS2019 which bears same coupon rate and is also maturing in 2019 but in the month of June. Each security is assigned a unique number called ISIN (International Security Identification Number) at the time of issuance itself to avoid any misunderstanding among the traders.

Importance of fixed income securities.

- **Steady Returns:** The biggest advantage of a fixed income security is that you are guaranteed a steady return on investment for a specific period of time. For example, if you invest in 3-year bonds at 3%, then you will receive 3 percent return on your investment every year for three years. It is guaranteed. Under no condition shall the return go low even to 2.99%. In contrast, with a variable income security, you have zero control over how much return you can get per year. Maybe you will receive a 5% return this year, and then 0% for the next three years. If you are unable to live with this uncertainty, then it is better that you only consider investing in fixed income securities. And in case you are interested in exploring the possibility of investing in bonds, check out Best-Savings-Rate.co.uk to know some of the best bonds in the market right now.
- **Safety of Deposit:** When it comes to the matter of safety of deposit, fixed income securities again outshine the variable ones. Most fixed income securities will always specify the date on which the invested amount will be returned to the investor. As such, those who issue fixed securities are legally obliged to return back the money right on the specified date, failing which legal action can be taken against them for recovering the amount. For example, a government bond will typically specify the maturity date on which the invested amount will be paid back. In contrast, there is usually no such safety of deposit guaranteed by any variable income securities. If you invest in stocks, then a large value of that investment can be wiped out if the company performance dips and stock prices crash.
- **Diversity:** A well-balanced portfolio will include both high-risk investments that offer high profits and low-risk investments that guarantee the stability of the principal. A portfolio that is only focused on making as much profits as possible without being concerned about the capital is likely to go bust due to excessive risk-taking. And as an investor, you can end up as a pauper if you follow such a high-risk investment strategy. The best way to protect your financial future is to invest an equal amount in fixed income securities. This way, even if the high-risk investments are wiped out, you still have the fixed income securities to rely on.

- **Priority During Company Liquidation:** Fixed income securities can also get priority over other securities during company liquidation. For example, corporate bonds are considered to be debts that the business owes to the investors. And since companies are required to honor their obligations to their debtors prior to the shareholders, bonds will be paid off first from the proceeds of the company liquidation. As such, by investing in company bonds rather than shares, you can be assured of a better protection of your investment if the business were to be declared bankrupt.
- **Protection of capital:** Fixed income investments are more appealing to risk-averse investors such as retired people. FIS tend to be much less volatile than an equity portfolio, which means they are less likely to incur large losses in a short span of time. The basic principle of FIS is repayment of principal at maturity. Investors are repaid the amount of money they originally invested at the end of the agreed period.
- **Assured income stream:** While many other asset classes provide some form of income, fixed income investments tend to offer assured income stream. Most importantly, some instruments within FIS provide income with a lower level of risk than equities, and may offer higher income than money market funds or term deposits. As FIS often perform well in different market phases compared to equities, they can help provide portfolio diversification, which over the long term can provide investors with better risk-adjusted returns.
- **Risks and returns:** The yield (return) is generally higher for corporate bonds compared to that of government bonds. This is because the perceived risk for investing in corporate bonds is higher though they have high grade credit rating. Mortgage-backed bonds have a yield that typically exceeds high-grade corporate bonds with comparable maturity, and have a low credit risk.
- So, how much of your portfolio should be in FIS? The answer to this depends on the asset allocation that is right for you, your goals, your age and your appetite for risk. FIS is an investment avenue wherein the investor gets predictable returns at set intervals of time. This investment class is relatively safe with low volatility making it an important part of your investment portfolio.

- **Reducing the risks:** Basic principle of fixed income securities is repayment of principal at maturity. Fixed income investments are more appealing to risk-averse investors. Government bonds, corporate bonds and mortgage-backed bonds are all fixed income securities. Some fixed income securities may offer higher income than money market funds or term deposits. Investor gets predictable returns from fixed income securities at set intervals of time.

Risk associated to fixed income securities:

- a) **Interest rate risk:** The main risk that can impact the price of bonds is a change in the prevailing interest rate. The price of a bond and interest rates are inversely related. As interest rates rise, the price of bonds falls. This is because investors can obtain bonds with a superior interest rate, which decreases the value of a bond that has already been issued. On the flip side, current bond holders benefit from a drop in interest rates, as it makes their bonds more valuable with other investors seeking out higher yields of previously issued bonds. Bonds with longer maturities are subject to greater price movement upon interest rate changes since an interest rate change has a larger impact on the future value of the coupon.
- b) **Credit or Default Risk:** The second main factor is credit or default risk. There is a risk that the issuer will go out of business and be unable to pay its interest rate and principal obligations. Issuers of high-yield bonds have more credit risk since there is likely to be a greater risk of default. To compensate investors for this higher risk, such bonds often pay higher interest rates. Rating agencies provide credit ratings for the issuers of bonds and can help investors gauge the risk associated with certain corporate bonds.
- c) **Liquidity Risk:** Except for government debt, most bonds are traded over the counter (OTC) and therefore carry a liquidity risk. Unlike the stock market, where investors can easily exit a position, bond investors rely on the secondary market to trade bonds. Investors who need to exit a bond position – to access their invested principal – may have a limited secondary market to sell the bonds.

Regulators

- **Reserve bank of India (RBI):** As a banker to the government, the RBI has a key task of managing the borrowing program of the Government of India. It has the Money market and the G-Secs market under its purview. Apart from its regulatory role it also performs several other important functions such as controlling inflation (by managing policy / interest rates in the country), ensuring adequate credit at reasonable costs to various sectors of the economy, managing the foreign exchange reserves of the country and ensuring a stable currency environment.
- **SEBI:** The SEBI acts as the regulator for the corporate debt market and the bond market wherein the entities raise money from the public through public issue. The regulation comprises of manner in which the money is raised and tries to ensure a fair play for the retail investor. It forces the issuer to make the retail investor aware of the risks inherent in the investment, through its disclosure norms. SEBI also regulates Mutual Funds and the instruments in which these mutual funds can invest. Investment from Foreign Institutional Investors (FIIs) also falls under the SEBI's scanner.

Factors to be considered while investing in fixed income securities

- 1. What is your current portfolio allocation?** You'll need to assess your current investment allocation between the major asset classes of equities, property and fixed income. Does this meet your long term objectives? Do you have enough 'protective' fixed income investments? Remember that even though cash, including term deposits is included in fixed income, those assets don't offer counter-cyclical benefits that bonds offer so that when higher risk asset classes underperform, bonds usually outperform smoothing portfolio volatility.
- 2. The capital you need to maintain your current lifestyle** Assuming the very worst possible scenario and you lose capital, what is the minimum capital you'd need to protect your current lifestyle?
- 3. The income you need to maintain your lifestyle**
- 4. Known liabilities** Bonds can be acquired with cash flows and maturity dates to suit known future expenses.
- 5. Risk appetite**
- 6. Age** The older you are the less time you have to recover lost capital. Also as you age, your earning potential may decline, again you may not be able to work to recover lost capital. Investors should consider that they generally need to be more protective of capital as they age and if you don't have enough capital to support your lifestyle when you retire, then it's not a good time to invest in high risk assets. One rule of thumb is that the maximum equities you hold should be 100 minus your age, so that if you are 70 years old then the maximum equity allocation should be 30%.
- 7. Capacity to earn income to supplement losses**
- 8. Diversification** Part of a building a balanced portfolio is making sure the investments you hold are across different industrial sectors, have varying maturities and risk profiles and in terms of a fixed income portfolio you should hold a different types of bonds, such as fixed and floating rate notes, inflation linked and government bonds.
- 9. Liquidity**

10. Return This is often the first consideration of investors and while important should be considered in light of the above. Remember higher returns often mean higher risk.

3.11 Evaluations Of Risk Exposure

Risk factor	Characteristics	What are you looking for?	Why does it matter?
Credit risk Liquidity risk	Credit quality	<ul style="list-style-type: none"> • Percentage of BBB-rated holdings • Percentage of high-yield 	These risk characteristics drive the potential for: <ul style="list-style-type: none"> • Price volatility • Downside risk • Complexity
	Sector exposure	<ul style="list-style-type: none"> • Out of benchmark/esoteric allocations • Concentration level 	
	Issuer concentration	<ul style="list-style-type: none"> • Top ten holdings percentage • Small-fund AUM 	
Interest rate risk	Duration	<ul style="list-style-type: none"> • Absolute level • Range over time 	
Leverage risk	Derivatives	<ul style="list-style-type: none"> • Negative cash balance • Zero or negative duration • Outsized returns 	

Fixed income vs. Fluctuating securities

	FIXED	FLUCTUATING
Status	Bond owners are creditors that can only claim the loaned amount and interest earned on it.	Equity owners have shared ownership of the company which allows them to claim profits.
Issuers	Government institutions, financial institutions or Corporates issue bonds Corporate deposits are issued by firms.	Equity is mainly issued by corporates.
Risk	Low risk as they are promised a fixed interest irrespective of the firm's performance	Highly risky as it depends on the performance of the firm and the market conditions.
Claim to assets	In the case of bankruptcy debt holders are prioritized over stockholders.	In case of bankruptcy, they have the last claim to assets.
Returns	Low but guaranteed interest returns.	High returns to compensate for high risks in the form of cost appreciation.
Dividends	No dividends are paid.	Dividends are cash flow of equity but paid at the discretion of management.
Involvement	Bondholders have no say in the company matters and voting.	Since stock owners are the owners of the firm, they have voting rights.

- **Ownership:** Equity holders are considered as the owners of the company. They have voting rights on important matters and have a say in the functioning of the firm. They have the first right on profit and are paid out dividends. However, if the management decides on using the profit for some other activities like reinvesting in the business, or for any mergers or expansions they can't be questioned. Hence dividends can be paid out but at the discretion of the

management. Bondholders, on the other hand, do not get voting rights or any such share in the profit. They are creditors to the firm and are only guaranteed fixed returns and the principal amount at maturity.

- **Risk and Returns:** Historically it has been proved that equity returns have surpassed returns of the fixed income. However, to gain those returns, risks undertaken by the investors have also been huge. Who can forget the great economic depression of 2007-08, or the dot-com bubble of early 2000? These have been times when stock markets have crashed by more than 25 – 30% to the extent of 40% at some rare times. Similarly, there have been times when the stock markets would have given returns of more than 35 % in a single year. These volatile returns make investments in equity highly risky and volatile. There are mainly 2 types of risks here – systematic risks and unsystematic risks. Systematic risks arise because of market volatilities during various economic periods. Unsystematic risks refer to the risks that are characteristic of individual firms and can be avoided through diversification.
- Fixed income, on the other hand, provides an element of certainty to your investments. Once you have invested in a bond, you are sure of the returns and the principal that you will be getting. During periods of economic expansion or recession, interest rates may vary but the guaranteed coupon payment that you have been entitled to receive, will not change. These stable returns of fixed income make them very attractive to risk-averse investors.
- However, these fixed but low returns can mean that your investments might not be able to keep pace with the inflation which in simple terms means that you are losing money year on year. The typical risk with fixed income securities is Default risk – the risk that issuer might default and may not be able to pay back the periodic cash flows and the principal at maturity. However, this risk is very low for sovereign securities like government treasury securities.
- **Bankruptcy:** In case of a credit event like bankruptcy, if the firm or the issuer of the bonds defaults then the investments in both are lost. In such a case the assets of the firm are liquidated to generate some cash. The amount thus received is first claimed by bondholders and once they have been compensated, the remaining amount is given to equity holders.

Importance of debt market to economy

Vibrant corporate bond markets have numerous benefits for companies, investors, economies, and governments, and can help meet a range of urgent global public policy challenges

As IOSCO and the World Bank recognise, corporate bond markets for non- financial companies have intrinsic economic benefits to recommend them. They minimise the friction and cost of intermediation between issuers and investors. They optimise management of cash flow and currency mismatches between issuers and investors.

They promote efficient diversification and allocation of available funds in the economy to the most productive uses. In current uncertain times, corporate bond markets harness capital and enterprise in an efficient way that has the potential, with returning confidence, to take strain off public sources of funding. They ease pressure on public funding by growing the private sector. They fulfil key policy objectives of yielding investors income and long-term value, and providing long- term economic sources of funding for issuers.

They provide an effective means by which new sources of finance - including the savings of emerging economies, the expected increase in private savings resulting from public sector retrenchment, and the expected increase in savings and private pension provision for ageing populations - can be invested most productively to support the real economy, promote worldwide prosperity, and boost growth.

They ease pressure on bank lending, particularly longer-term lending, and allow a wider range of corporate credits to access investment markets and seek finance than the banks or government agencies could provide.

They replace lending capacity that has evaporated as a result of deleveraging by and declining market confidence in banks. They offer an additional funding mechanism for companies, providing additional capacity if they have a significant need, and continuing finance if bank funding is not available

Advantages and Disadvantages of fixed income security

Benefits of Investing in Fixed Income Securities

- *Stable Returns*

One of the primary benefits of investing in fixed income securities is the stability of returns that they offer. Since these instruments have a fixed interest rate, the returns delivered by them are more or less steady. This makes them a comparable alternative to bank savings accounts which give a minimal interest rate on your deposits.

- *Safety of Investment*

The invested capital in a fixed income security is at lower risk when compared to investment in equities. As some of these instruments, such as treasury bills or government bonds, are backed by the government, the chances of defaulting on the payment of interest and principal is almost zero. Also, if the instrument is highly rated by the credit rating agencies such as CRISIL, the possibility of an investor incurring a loss is minuscule. This makes fixed income financial instruments, one of the safest investment avenues available in the market.

- *Portfolio Diversification*

Investment in fixed income securities offer a much needed diversification to a concentrated portfolio of equities. It is a well-known fact that equities deliver much higher returns than debt securities, however the volatility of returns delivered by the former is much higher than that of the latter. To make your overall portfolio returns stable, it is imperative that you make a significant investment in highly rated debt securities.

- *Priority during Liquidation*

When the company files for bankruptcy and goes for liquidation, it is liable to pay back to its debtors and stock holders. However, it might not have enough assets to pay off both. In that case, lenders of the company, who hold corporate

bonds of the firm get priority over those who hold equity. This is one more reason why debt securities are considered to be a safe investment avenue.

Disadvantages of Fixed Income Investments

Along with the advantages of the fixed income investment, there are some disadvantages or limitations as well of the same which are as follows:

1. **Interest rate risk:** Fixed income investments are subject to the interest rate risk. This risk arises when the interest rate in the market in which the person has invested rises. Now as he has already invested at the fixed rate so he will be getting the same rate or returns till the maturity even though he can get more interest paying securities at the same level of investment. He cannot invest in the new securities paying high return because his money is already locked.
2. **Credit Risk:** If due to some internal or external factors the position of the company in which the investor has invested his money declines, then the value bond or instrument of that company will also decline in the secondary market. Now if the investor tries to sell the instrument before its maturity then he might get the low prices or he might even find it difficult to sell it before maturity.

Research design

A research design is the sets of methods and procedures used in collecting and analysing measures of the variables specified in the problem research. In short it is a framework of research methods and techniques chosen by a researcher. The design of a study defines the type i.e. descriptive, correlational, semi-experimental, experimental, review, meta-analytic and sub type i.e. descriptive-longitudinal case study, research problems, hypothesis, independent and dependent variables, experimental designs and if applicable, data collection methods and a statistical analysis plan. A research design is a framework that has been created to find answers to research questions. The design allows researchers to hone in on research methods that are suitable for the studies up for success.

The research would be descriptive, empirical as well as analytical. The design would be based on the objectives of the study. Data in relation to the fixed income securities collected from primary and secondary sources. The questionnaire method is used to collect the views, suggestions, opinions regarding this study. The sample size of this study is limited.

Data collection methods:

Data is one of the vital aspects of any research studies. Every research is based on the data which is analysed and interpreted to get information. There are two sources of data. Primary data collection applies surveys, questionnaires, experiments or direct observations. Secondary data collection may be conducted by collected by collecting information from diverse source of documents or electronically stored information. In this research paper, two data collection will be used which is primary data and secondary data collection.

Primary data method

It is obtained from the original source of information. Primary data is collected by the person himself or hires the person to the conduct the research. The person himself or the one who is being hired by the one who is actually conducting the research collects the data either by questionnaire method, interview method, surveys, etc. The primary

data are more reliable and have more confidence level of making decision with the trusted analysis having direct intact with occurrence of the events. This type of data is generally fresh and collected for the first time. It is useful for current studies as well as for future studies. There are many methods can be of primary data where the raw material can be i.e. questionnaire method, interview method, survey method, focus groups, observations, group discussions, etc. When the primary research is conducted there is gathering of two basic kinds of information:

- Exploratory picture: This research is general and open ended, and involves lengthy interviews with an individual or small group.
- Specific: This research is more precise and is used to solve a problem identified in exploratory research. It involves more structured and formal interviews.

Questionnaire method:

In this research study the method used to obtain the raw material is questionnaire method. A questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from respondents. Questionnaire provide a relatively cheap, quick and deficient way of obtaining large amounts of information from a large sample of people. Data can be collected relatively quickly because the researcher would not need to be present when the questionnaires were completed. This is useful for large populations when interviews would be piratical. Questionnaires can be an effective means of measuring the behaviour, attitudes, preferences, opinions and intentions of relatively large number of subjects more cheaply and quickly than other methods. Often a questionnaire uses both open and closed questions to collect data. This is beneficial as it means both quantitative and qualitative data can be obtained.

The collection data tool that has been chosen in this study is questionnaire. The questionnaire was administered to respondents through Google forms. The used of the questionnaire in this study does not meddle with the daily routine at the respondents since it took them only several minutes to answer the questionnaire. A questionnaire has a list of enquires whether in an open ended or close ended foe which respondents will give answer according to their cognition. For this survey, the questionnaire is usedthe closed ended question format, in which case the respondent is asked to select an answer from among a list provided. The information obtained through questionnaire method in closed ended questions is presented in the form of bar graphs or pie charts.

Sampling

Sampling is the selection from within a statistical population to estimate characteristics of the whole population. Statisticians attempt for the samples to represent the population in question. Two advantages of sampling are lower cost and faster data collection than measuring the entire population. Each observation measures one or more properties of observable bodies distinguished as independent objects or individuals. In survey sampling, weights can be applied to the data to adjust for the sample design, particularly in stratified sampling. Results from probability theory and statistical theory are employed to guide the practice. In business and medical research, sampling is widely used to gather the information about a population.

The business man, traders, service employee, person doing internships and article ships and students doing business along with their studies. All of them were given questionnaire to answer some questions and to know their opinions, suggestions or views regarding this research study. A large number of samples was not taken as the respondents who are answering need to have some knowledge of the fixed income securities.

Sample size

Sample size determination is the act of choosing the number of observations or replicates to include in a statistical sample. The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. In practices, the sample size used in a study is usually determined based on the cost, time and convince of collecting the data and the need for it to offer sufficient statistical power.

The sample size of this study is 100 respondents. The responses are obtained through questionnaire method.

Sampling method

Various types of sampling methods can be employed, individually or in combinations. Factors commonly influencing the choice between these designs include: nature and quality of the frame, availability of auxiliary information about units on the frame,

accuracy requirements and the need to measure accuracy, whether detailed analysis of the sample is expected, cost and operational concerns

The sampling method was chosen who had knowledge about the fixed income securities.

Secondary data method:

In this, the data is collected, compiled, organised and published by others. It includes reports and studies by government agencies, trade associations or other businesses in the industry. For small businesses with limited budgets, most research is typically secondary, because it can be obtained faster and more affordable than primary research. One excellent source of secondary research data is government agencies, this data is usually available free of charge. On the other hand, data published by private companies may require permissions and sometimes a fee. A lot of research is also available on the web simply by entering the keywords and phrases for the type of information one is looking. The secondary data can also be available from newspapers. Journals, magazines, articles, industry publications, etc.

Secondary data regarding fixed income securities is collected through various websites to collect the data regarding the rates of the securities.

5.Review of literature

A review of literature or narrative review is a type of article review. It is a comprehensive summary of previous study or research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area or topic. The review includes describe, enumerate, summarize, clarify this previous research. It includes scholarly papers along with theoretical and methodological contributions to a particular topic. Literature review is a secondary data or sources and not the original one as it does not include any new work or research. The review includes information from journals, magazines, newspapers, articles, books, etc. which is originally researched by one someone else and that research is used by someone else as review of literature by giving the overview of the whole research in a paragraph. Producing a literature review may also be part of graduate or post graduate student work. The review helps the reader to understand the development in the field. The purpose of literature of review is to convey the reader about what knowledge and ideas have been established in the topic and what are their strength and weakness. The literature review means that the research has been done thoroughly by the reader and has been explain in shown.

1. **Roger McIntosh, Vijay A. Murick (April 2012)** researched on “**The role of fixed income as a part of diversified investment strategies**” The researcher has highlighted various benefits of holding fixed income securities and the reason as to why one should invest in fixed income securities. He analyzed the investing behavior of the Australian investors and found that these investors haven't embraced fixed income as a part of their asset allocation. He used secondary data regarding to collect the data regarding the asset allocation of Australian managed funds. Furthermore, he even researched the monthly return of Australian equities and fixed income. He concluded that including fixed income provides efficiency gains and from reducing the variability below the weighted average of combined asset classes.
2. **Dr. Rima das (December 17, 2017)** has researched, “**The empirical study on corporate bond market in Indian economy.** This research paper examines the financing pattern of 85 non-financial Indian private sector companies based on CMIE database with specific reference to corporate bond. The study reveals that 90% of the companies mainly depend on borrowings from banks and financial

institutions constituting the largest portion of the total borrowings followed by other borrowings, debentures/bonds and foreign borrowings. It shows that bonds/debentures still do not constitute bulk of corporate borrowings compared to bank borrowings and this highlights the importance of strengthening the bond market so that corporate can access more funds from them. Studying the financing pattern of non-financial Indian private sector companies (sample size 85, based on CMIE database for 6 years) with specific reference to corporate bonds helps to understand the growth of corporate bonds and also assess the reforms/policies initiated by various regulatory authorities and its implications on the growth of corporate bond market in India for last 10 years.

3. **Pooja nemey (June 2019)** researched on **‘Indian corporate bond market: analysis of growth and impact of macroeconomic determinants’**. Robust, deep and vibrant corporate bond markets are necessary to increase financial system stability of a nation, help the needs of credit and mitigate financial crises of corporate sector that is important for the economic growth. The present article focuses on Indian corporate bond market growth and its impact on some select monetary, fiscal and economic variables as this creates advantages for investors, corporates and governments from 2006–2007 to 2016–2017. The study used the secondary data collection method with the help of monetary, fiscal and economic variables as independent variables and yield rate as dependent variables. From the analysis, it was identified that a complete corporate bond market is associated with economic, monetary and fiscal variables neither negatively nor positively nor at a significant rate. The result of the analysis concludes that among all the selected variables, GDP in percentage is considered as the chief variable that is predominantly mandatory for India because it is commencing its bond market with the foreign participants.
4. **Deepak Singh (6 July 2012)** researched on **“Fixed income securities in India”**. The researcher analyzed the various fixed income securities in India and their benefits of investing as a long term prospects. He also analyzed the yield curve of various securities. The rate of securities and the trend over the years was further mentioned by using secondary data. He also concluded that the fixed income securities are necessary for balanced portfolio.
5. **Tanvisinghal (2015)** researched on **“A study of factors influencing switching behavior of fixed deposit investors of Indian banks “it**. The researcher has used

descriptive study as the existing factors would be considered in the proposed study to analyze the switching behavior of Fixed Deposit Investors and the researcher has no control over the variables. This particular study has helped to understand the present scenario and future opportunities of Fixed Deposits for Investors and also helps to identify the particular factors for switching.

6. **Joom Kim (August 1989)** researched on “**The valuation of corporate fixed income securities**”. The researcher has researched on valuation models that are capable of generating yields spreads consistent with the levels observed in practice. According to the researcher numerical solutions are employed to show that resulting yield spreads are sensitive to interest rate expectations but not the volatility of the interest rates. Interactions between call provisions and default risk in determining yields spread is explicitly analyzed to show that call provision has a differential effect on Treasury issues relative to corporate issues.

7. **Gerhard frank (31 July, 2017)** researched on ‘**Bond markets and economic growth**’. This paper examines the relationship between the development of the aggregate bond markets and real GDP in 13 highly developed economies. The recent interest in the ties between the real and the financial sector has usually been on the banking sector and the stock markets, rather ignoring the bond markets as a third essential source of external finance. They fill this gap by providing empirical evidence for causality patterns supporting the supply-leading approach in the USA, UK, Switzerland, Germany, Austria, the Netherlands and Spain over the 1950 to 2000 period. In the cases of Japan, Finland and Italy we find evidence of interdependence between bond market capitalization growth and real output growth. Granger causality test and co-integration approach are employed to support this conjecture.

8. **BasudebGuha-KhasnobisSaibalKar** researched on “**The Corporate Debt Market in India: An Analytical Study of Macroeconomic and Institutional Issues**” Prior to the reforms of the early 1990s, development policy in India was based on centralized planning dominated by the public sector, with the marked absence of well-developed corporate industrial and banking systems, as well as an efficient market for secondary and tertiary activities. While there had been some private initiatives in the industrial scene, participation of private banks and institutions in the financial market was almost non-existent. Public sector

banks and financial institutions accounted for nearly 75–80 per cent of financial intermediation in India. Economic development in India hinged on captive investments in government securities by the public financial institutions, and on direct lending to the public sector units. Rates of interest on government debt were administered and the rate of interest on central bank financing was hugely subsidized. At the same time, exposure to foreign capital was limited.

9. **Hema P. Gwalani and Dr. D. B. Bharati (March 2015)** researched on “ **An Analytical Study of the Awareness Level of Corporate Bond Market in India Among Retail Investors**” creating the Liquidity in Corporate Bond Market has been a major agenda for the Government and for the Capital market authorities for long now. Various efforts in the forms of reforms, change in guidelines and making availability of the required infrastructure has been made in the direction but still the efforts does not seem to give the expected results when it comes to the participation retails investors in Corporate Bond Market India. . One of the major reasons of the non-participation has been lack of sufficient awareness on the part of retail Investors. This paper tries to measure the awareness level about the Corporate Bonds and also the reasons for the non-participation of the retail investors in the Primary and Secondary Markets of Corporate Bond Market, with the help of data collected and its statistical analysis.
10. **K. Kanagasabapathy (2001)** in his article titled “**A Technical Note on Savings and Savers as Stakeholders**” brings out the concept that the savings behaviour of the individual investors influence a nation’s consumption behavior. Savings may be influenced by the investment opportunities or investment demands, which depends upon the growth and the potential returns available. The level of savings will also depend upon the avenues available in the economy for mobilizing such savings particularly from the household sector in the form of well-developed financial system with a variety of institutions and markets for different instruments. The study also concluded that nation's economic policy also influences the savings behavior of its citizens.
11. **Jain D. and R. Kothari (2010)** in their article “**Investors’ attitude towards Post Office Deposits Schemes**” attempts to identify the awareness, preference, problems and attitudes of investors' towards various deposit schemes 33 offered by post office among 100 respondents of Udaipur district. The primary data is collected through structured questionnaire and convenience sampling is used.

Statistical tools like simple percentage, chi-square analysis, standard deviation and mean were taken to find out the significance level. Thus, from the study it is found that majority of the respondents invest in post office deposits schemes for the purpose of safety and security.

6.

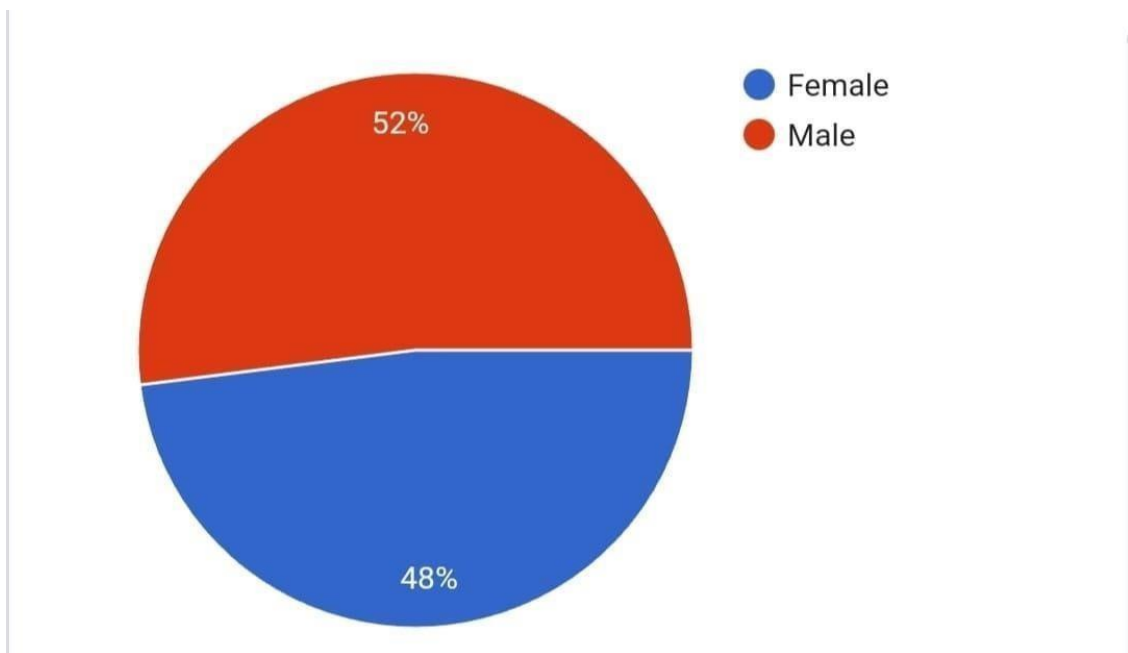
DATA ANALYSIS AND INTERPRETATION

RESPONSES

No of respondents : 100

1) Gender

100 responses

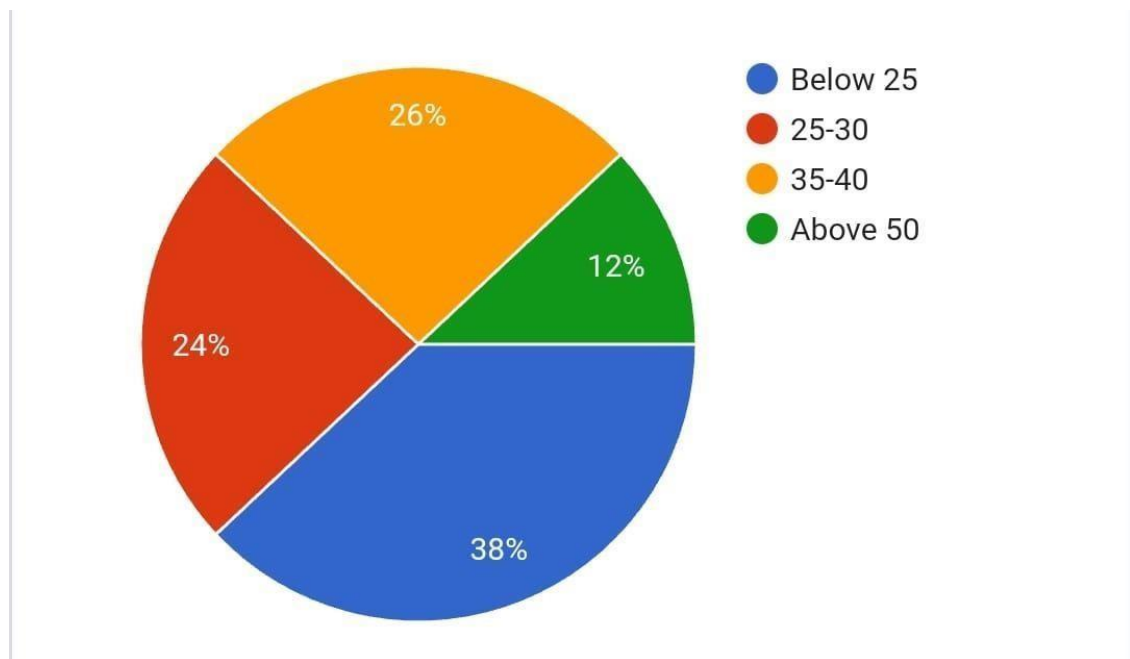


Interpretation ;

In this survey there are 52 % Male respondent and 48 % Female respondent are there

2) Age

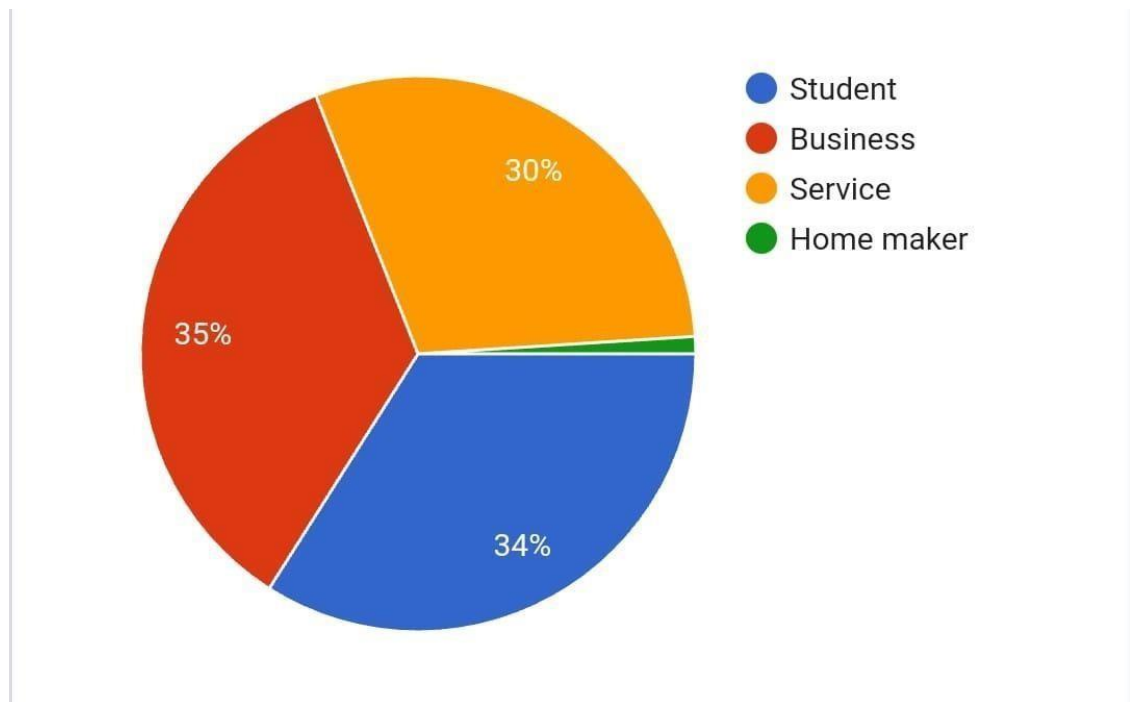
100 responses



Interpretation :

Out of 100 respondent 38% are below 25 year and 24% are 25 to 30 year , 26 % are 35 to 40 yrs age and there only 12% above 50 year so most of the Respondent are below 25

3) occupation
100 responses

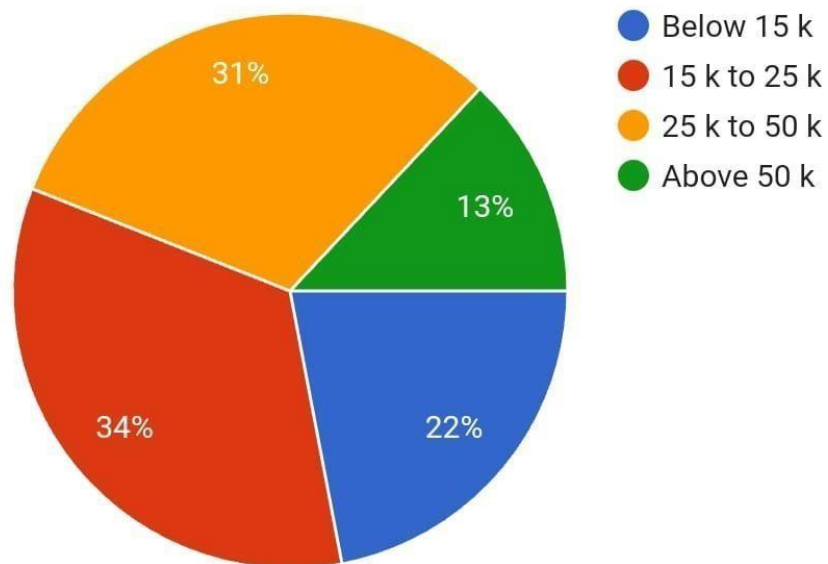


Interpretation :

Out of 100 respondent most of the respondent are in business and 34 % respondent are student's , 30 % respondent are In sevice industry and 1% are homemaker.so As we see most of the business are invest in securities

4) Income group

100 responses

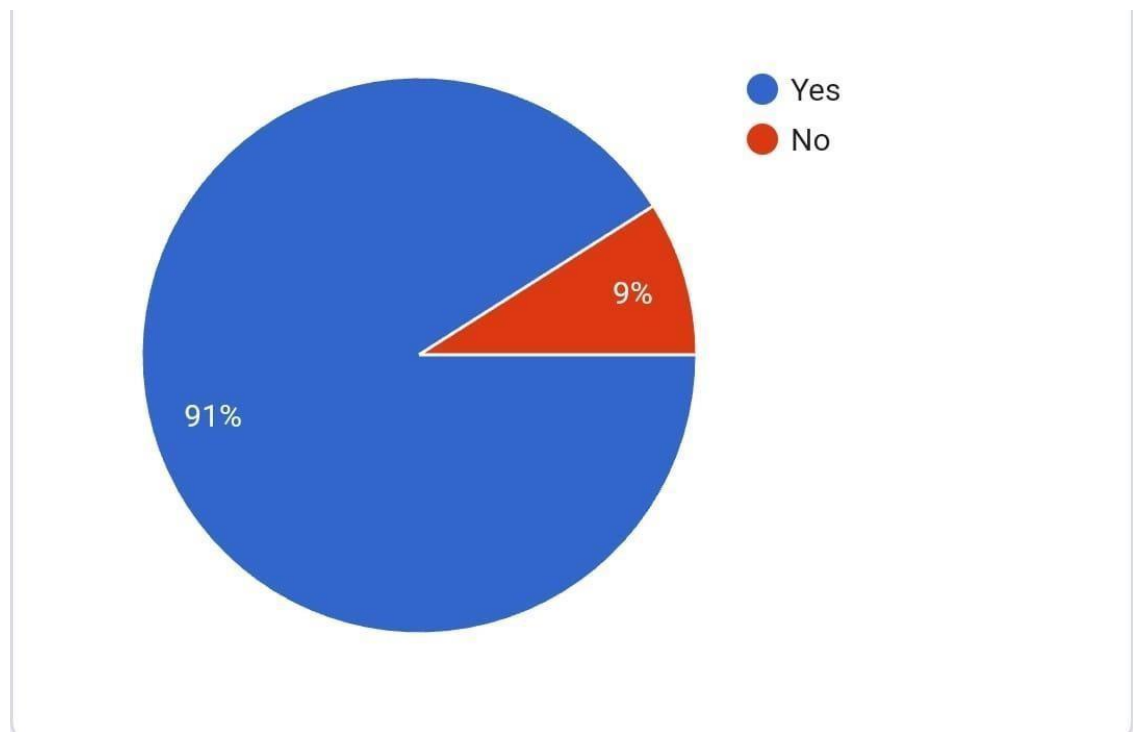


Interpretation :

Out of 100 respondent 22 % respondent are earn below 15 K and 34 % Respondent earn between 15 K to 25 K ,31% respondent are earn 25 K To 50 K and only 13 % respondet earn 50 K.

5) Do you invest in fixed income security ?

100 responses

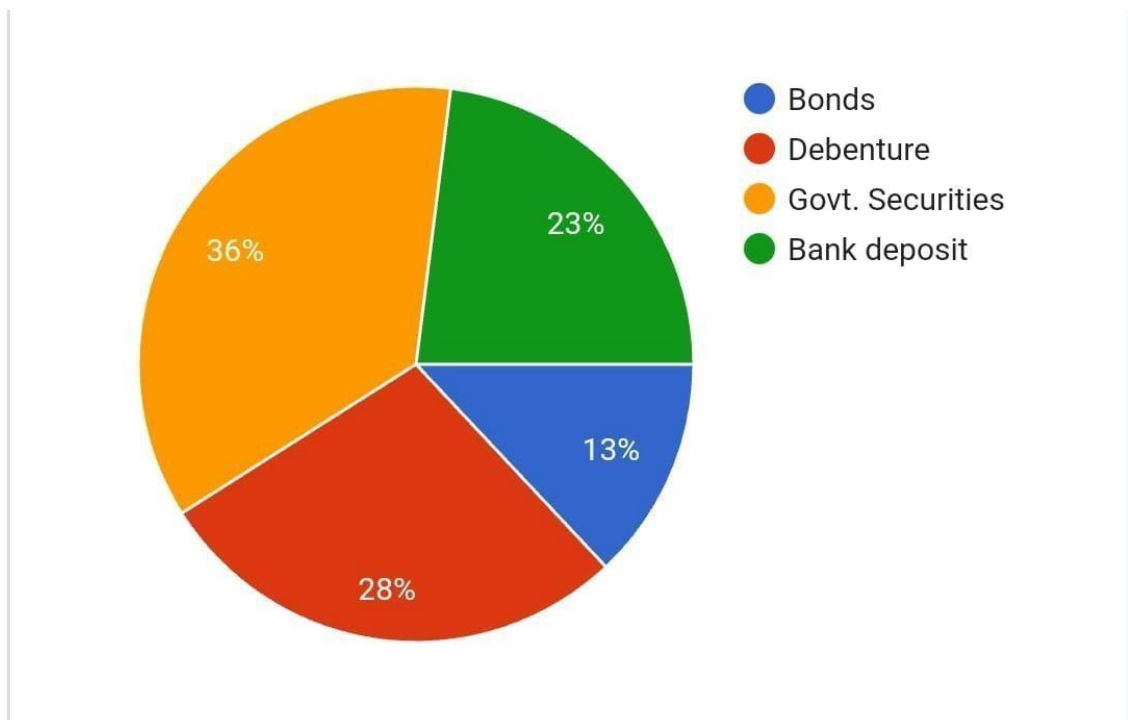


Interpretation :

Out of 100 respondent there are 91 % respondent are invest in securities and 9 % Respondent are not invested in securities

6) Which type of fixed income security do you invest in ?

100 responses

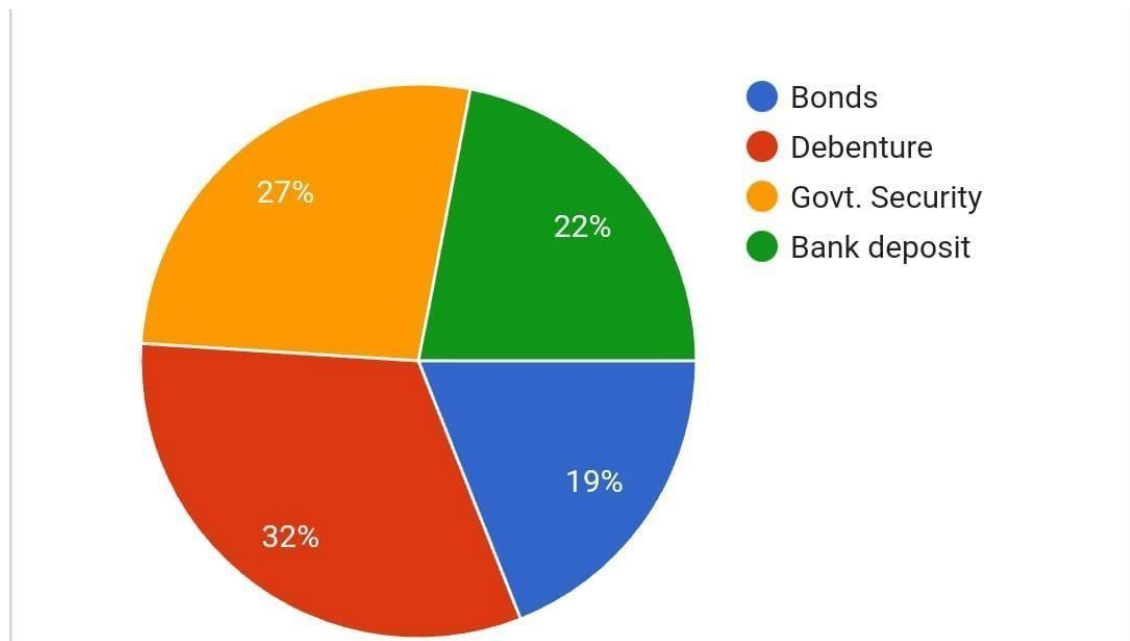


Interpretation :

There are 28 % respondent who invested In debenture and 36 % respondent invest Govt.security ,there are 23% respondent invest in bank deposits and only 13 % Respondent who invest in bonds.

7) Which among the following security do you invest in ?

100 responses

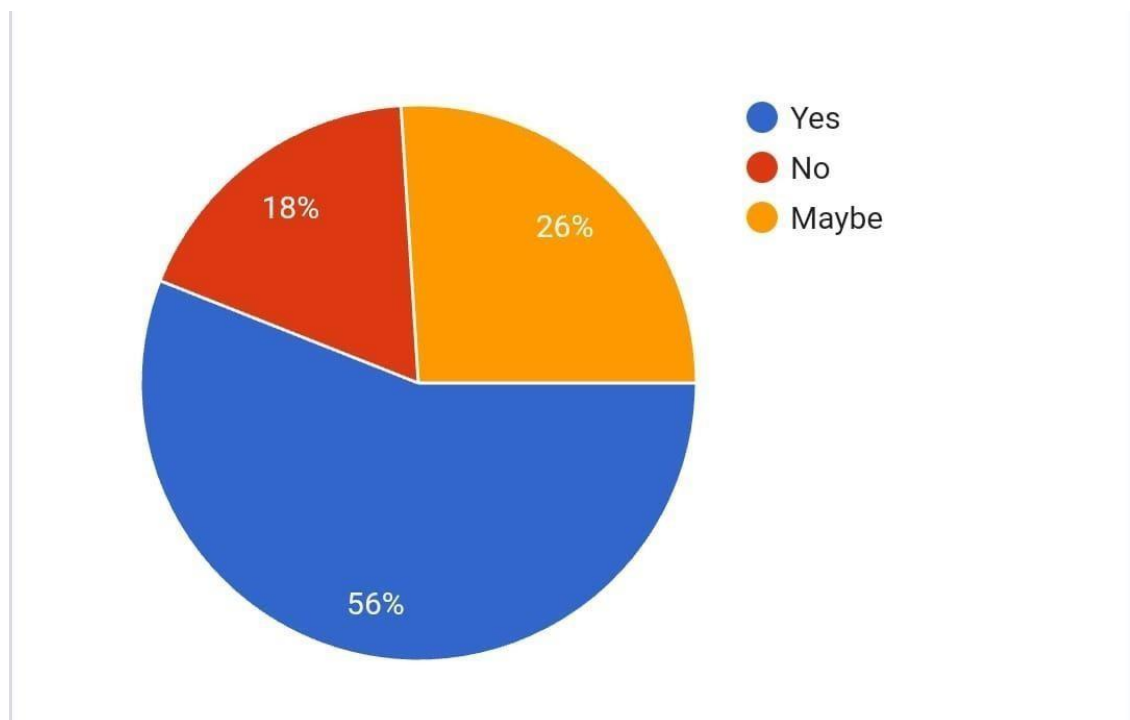


Interpretation :

There are 32 % respondent who invested In debenture and 27% respond Invest in govt. security ,22 % respondent invest in bank deposit and 19 % invest in bonds

8) After recent scams like ILAND and PNB do you still belief that fixed income security are safer and better than other investing avenue ?

100 responses

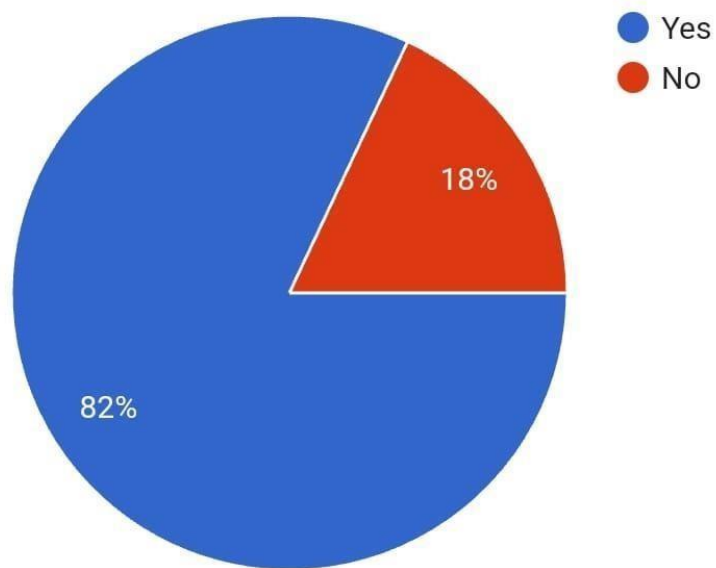


Interpretation :

Out of 100 respondent 56 % people bilief that fixed income security are safer and better than other investing avenue and 18% people think opposite 26 % people answer is maybe

9) Do you think that global socio economic condition have a impact on Indian market of fixed income securities ?

100 responses

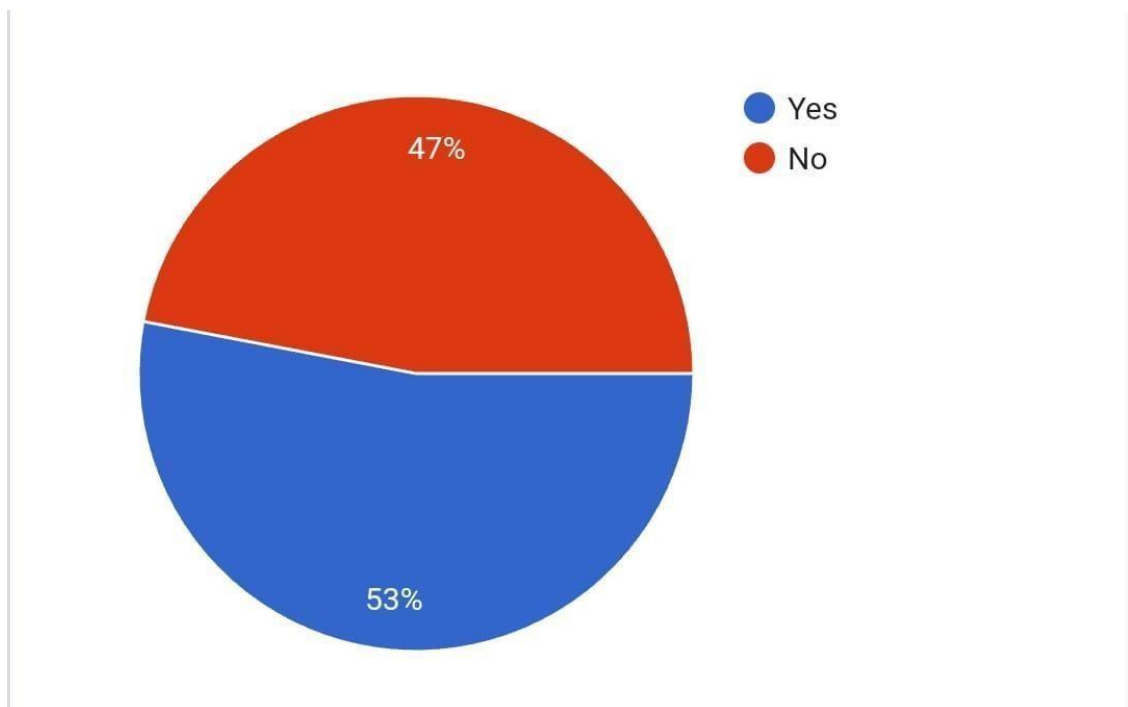


Interpretation :

Out a 100 respondent there are 82% people think global socio economic Condition have a impact on indian market of securities and 18% people doesn't Think.

10) Have you experienced any challenges in investing fixed income security ?

100 responses

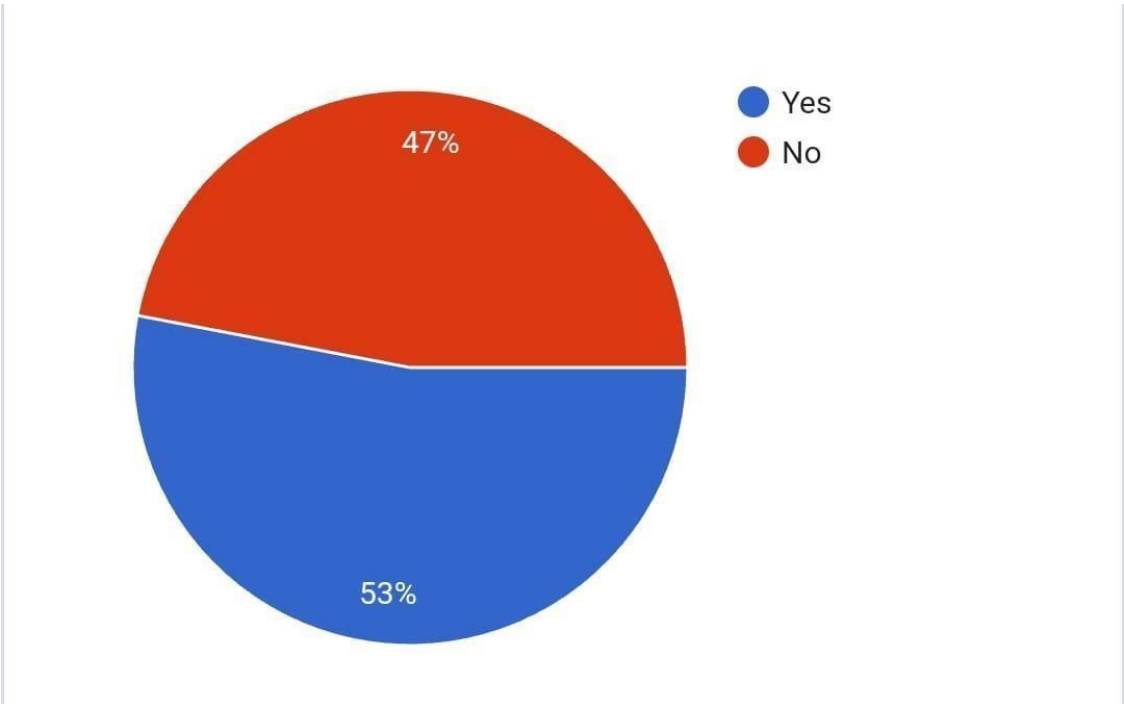


Interpretation :

Out of 100 respondent 53 % respondent having facing challenges in investing Fixed investing security where 47 % people doesn't face any challenges

11) Have you experienced any losses in your fixed income security in the past ?

100 responses

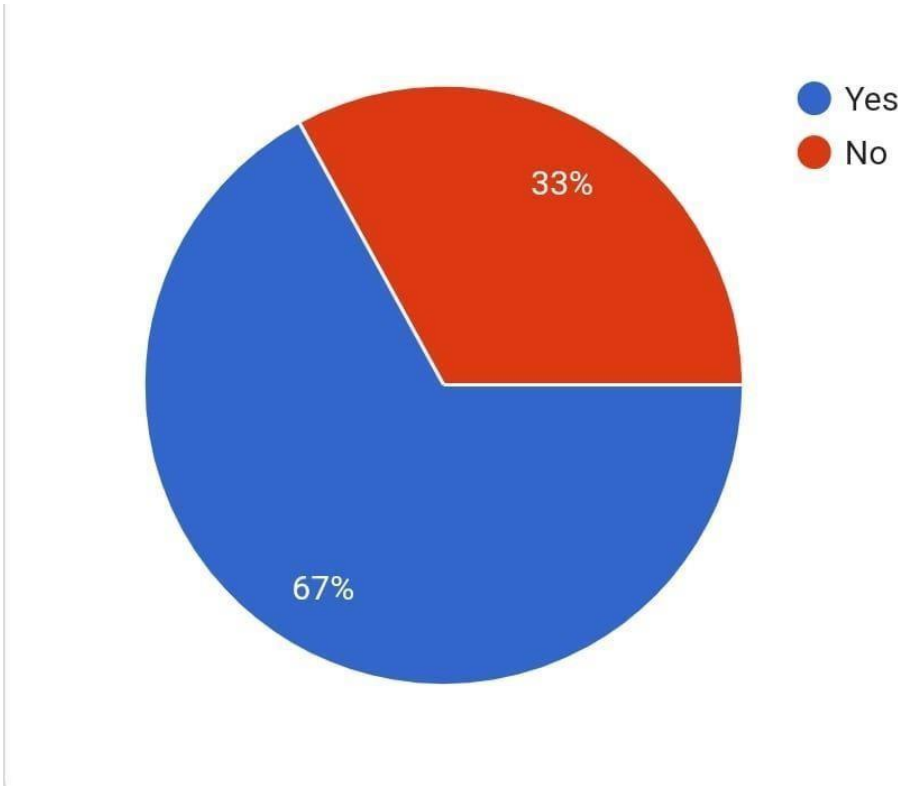


Interpretation :

64 % respondent face losses in fixed income security in the past and
36 % respondent doesn't face ay losses in the past

12) Are you satisfied with your return which you invest in fixed income securities?

100 responses

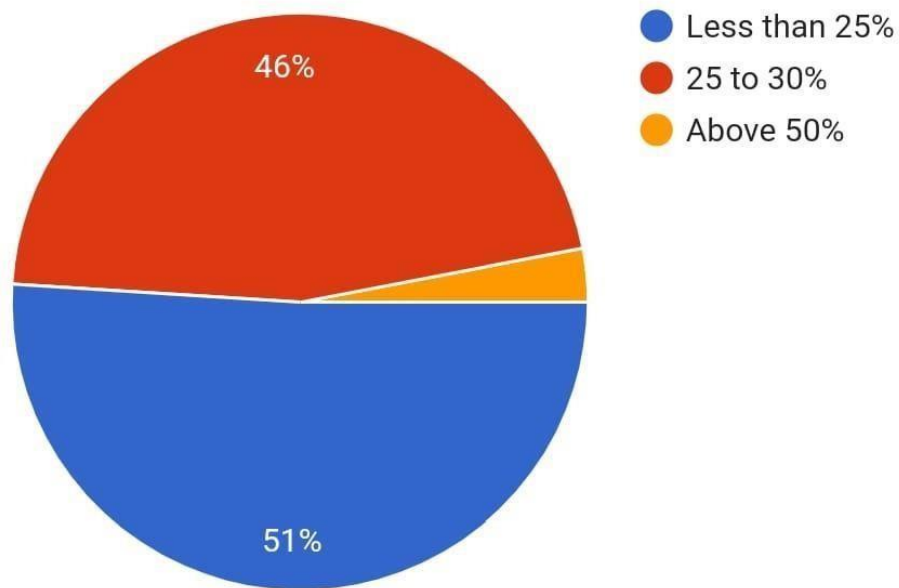


Interpretation :

Out of 100 respondent 67% people are satisfied with their return
Where as 33% respondent are not satisfied with their retur

13) What proportion of your portfolio would you like to invest in fixed income Securities ?

100 responses

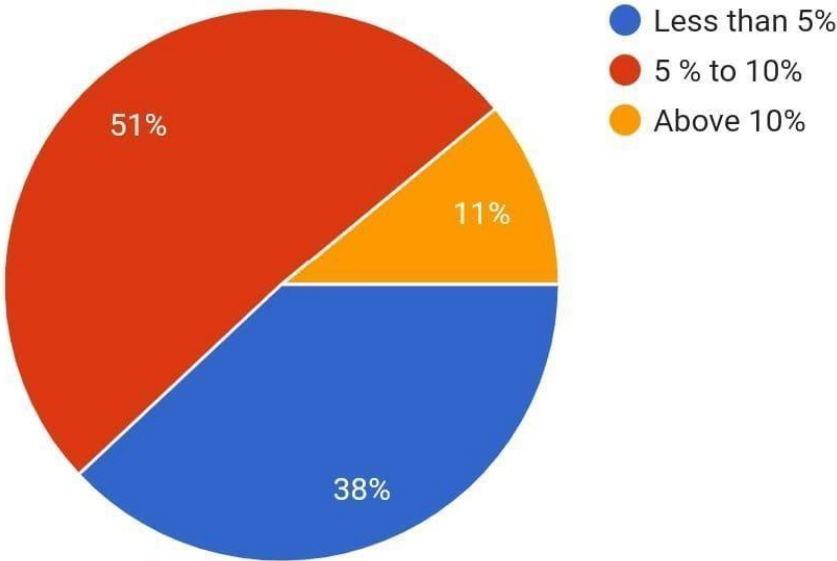


Interpretation :

Out of 100 respondent there are 51 % respondent invest less than 25 % Of Their portfolio in fixed income securities and 46 % would invest between 25 to 30 % of their portfolio in securities , 3 % respondent invest above 50 %

14) How much return do you expect from fixed income investment ?

100 responses

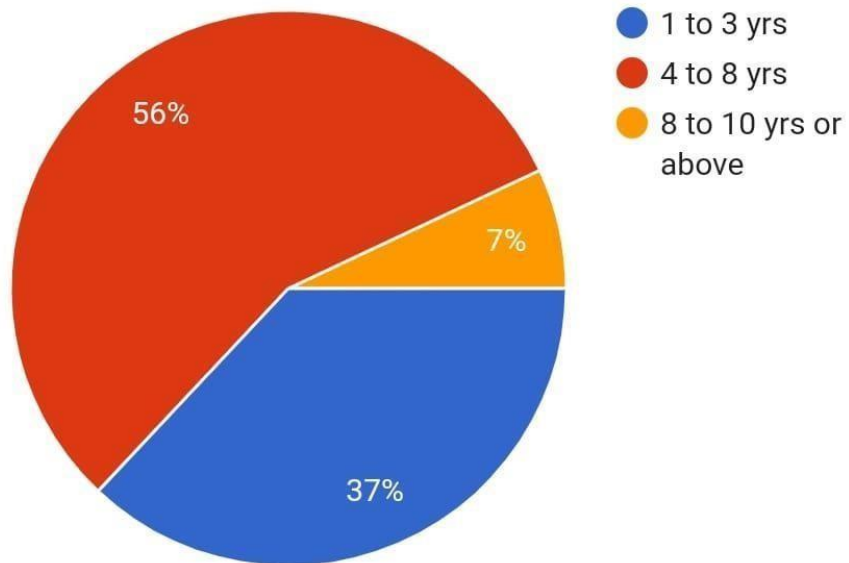


Interpretation :

Out of 100 respondent 38 % respondent expect less than 5 % return of Their fixed income investment and 51 % respondent expect between 5 to 10 percent of their investment ,and only 11 percent expect above 10 Percent.

15) How soon do you expect to need the money which you are invest in securities ?

100 responses

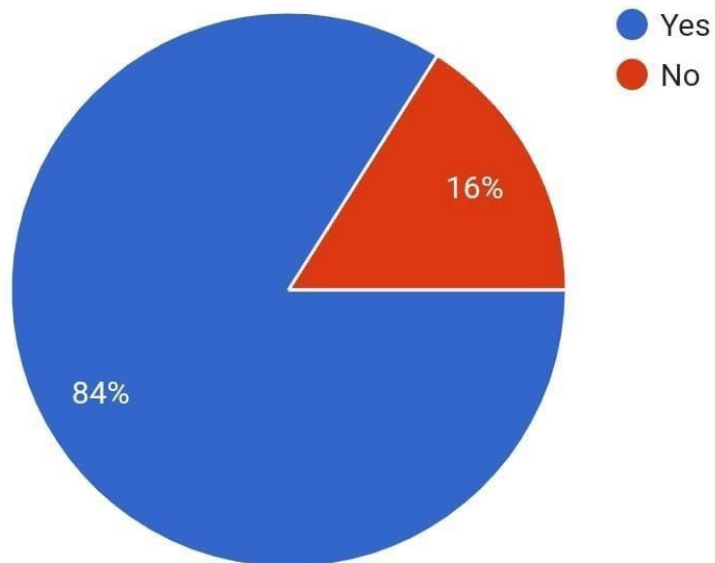


Interpretation :

Out of 100 responses 56 % respondent require money between 4 to 8 yrs
Which there are invest in securities and 37 % respondent require money
Between 1 to 3 yrs and only 7 % require money 8 to 10 yrs or above

16) Do you think corporate bonds as a fixed income investment option is good for Investing ?

100 responses

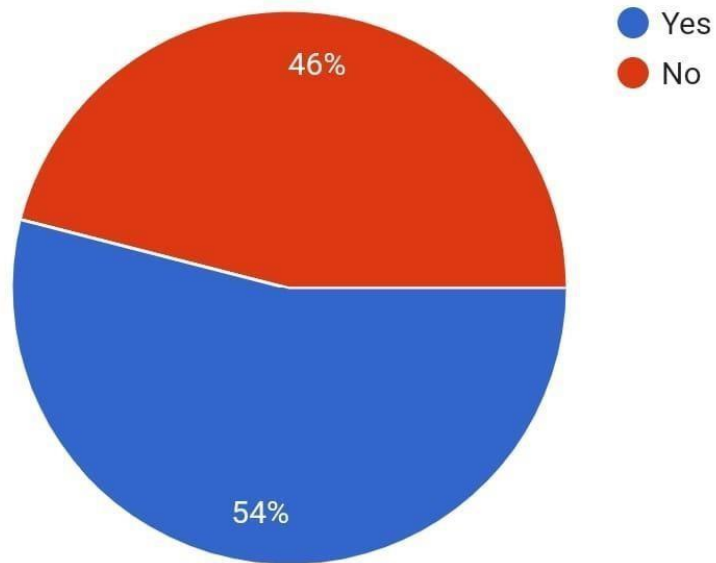


Interpretation :

Out of 100 responses 84 % respondent think that corporate bonds as Fixed income investment option is good for investing where 16 % Respondent doesn't think corporate bonds is good for investing .

17) Have you ever invested in real estate investment trust as a fixed income option ?

100 responses

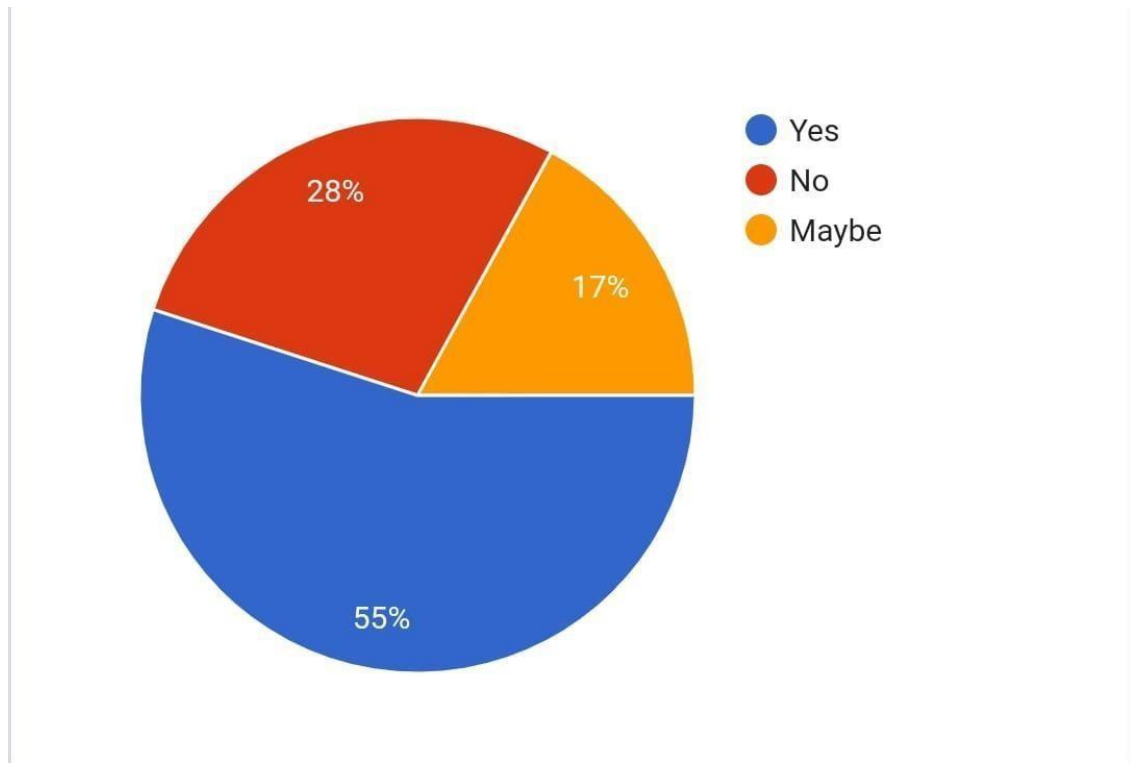


Interpretation :

Out of 100 respondent 54 % respondent invested in real estate trust as a Fixed income investment and 46 % respondent doesn't invested in real Estate.

18) Do you think changes in interest rate affect your fixed income investment ?

100 responses

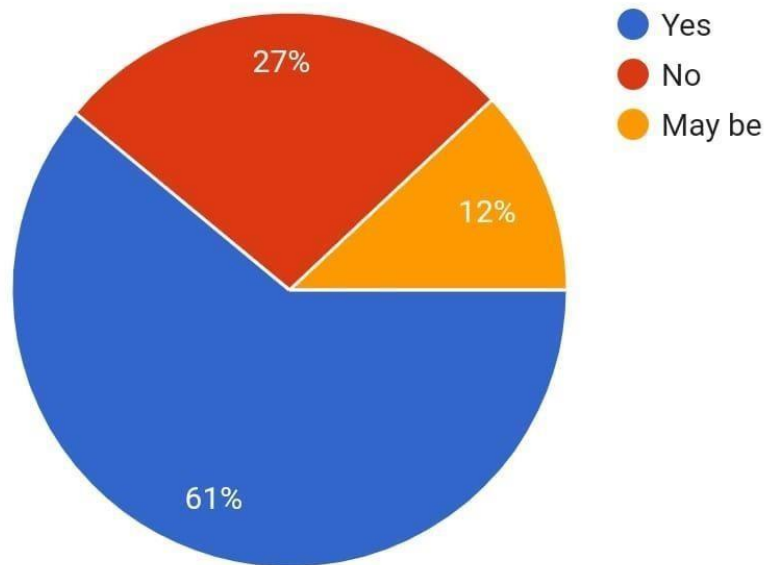


Interpretation :

Out of 100 responses 55 % respondent think that changes in interest Rates affect their fixed income investment and 28 % respondent say That changes in interest rate affect their investment .

19) Do you think uses of technology in fixed income securities is really affected ?

100 responses

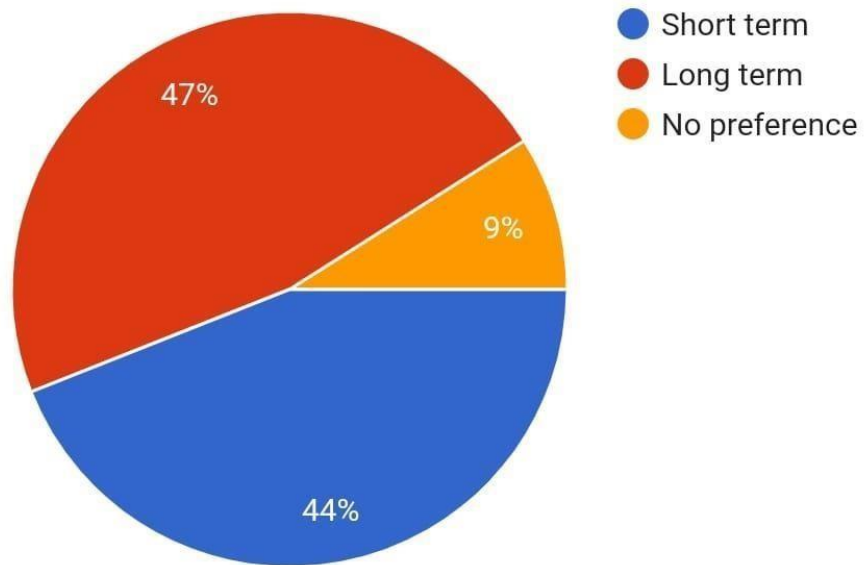


Interpretation :

Out of 100 responses 61 % people say that uses of technology in fixed income Security is really affected and 27 % people doesn't think that ,12 % responses is May be.

20) Do you prefer short or long term fixed income investment ?

100 responses

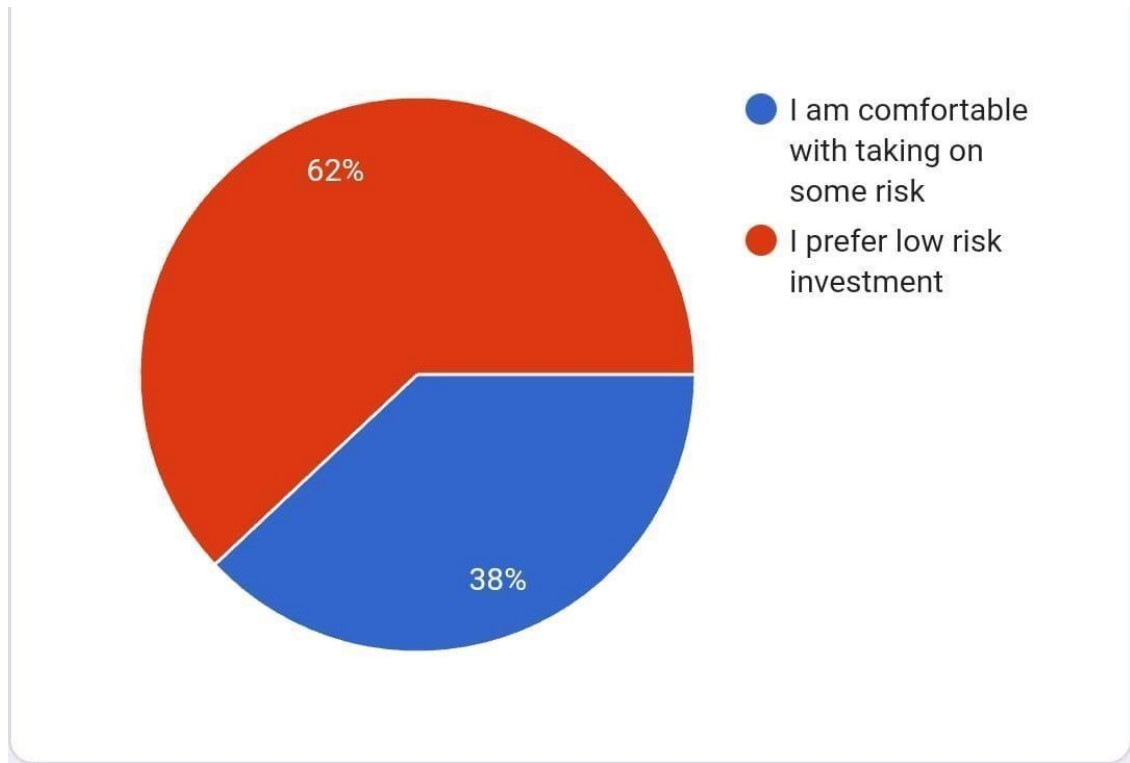


Interpretation ;

47 % respondent invest in long term fixed income investment and 44 % Respondent prefer short term investmet whether 9 % investor have no Preference.

21) How do you feel about taking on risk when investing in fixed income security ?

100 responses

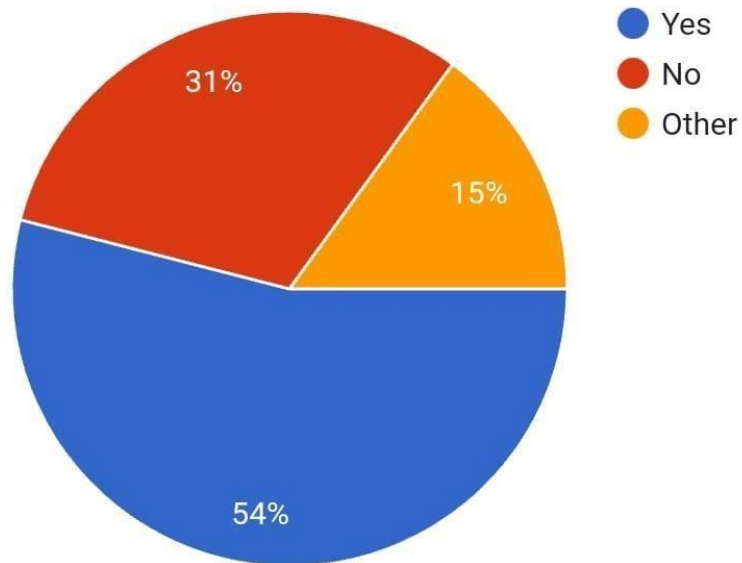


Interpretation :

38 % respondent are comfortable with taking on some risk in fixed Income security and major of the investor prefer low risk investment.

22) Would you consider investing in high yield or junk bonds ?

100 responses

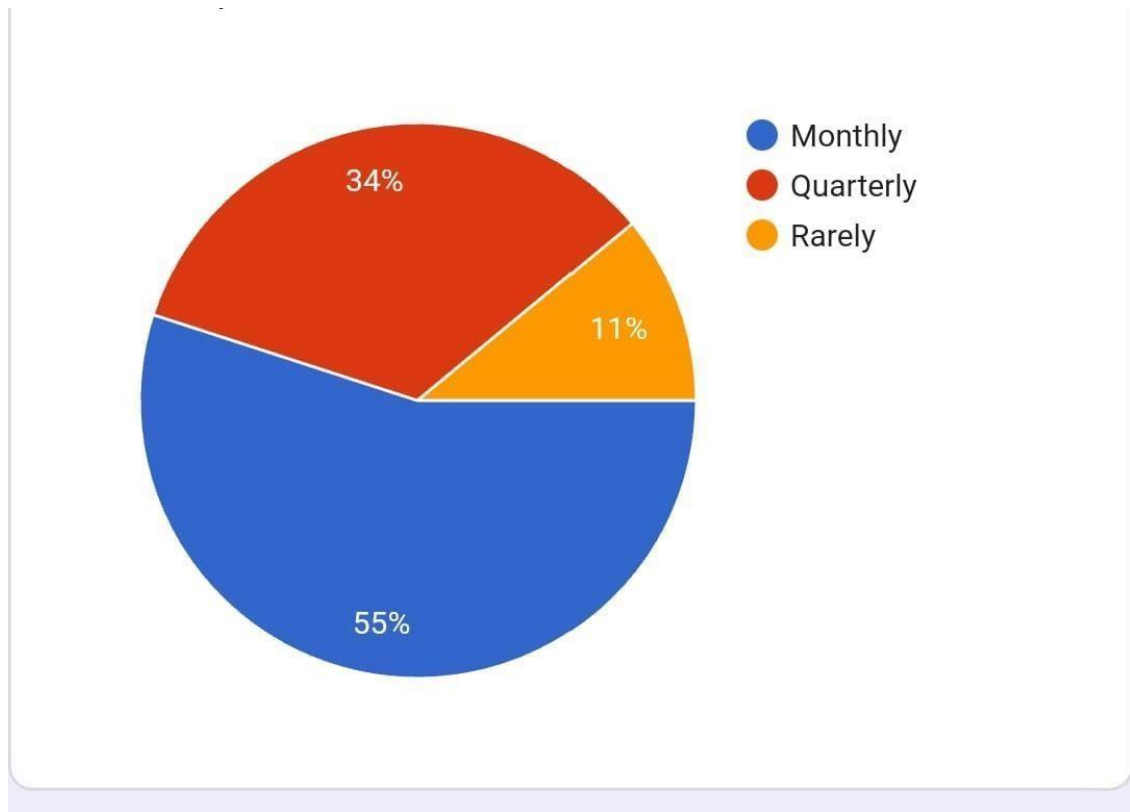


Interpretation :

Out of 100 responses 54 % people consider investing in high yield or junk Bonds and 31 % people would not consider high yield or junk bonds.

23) How would do you review and make changes in fixed income portfolio ?

100 responses

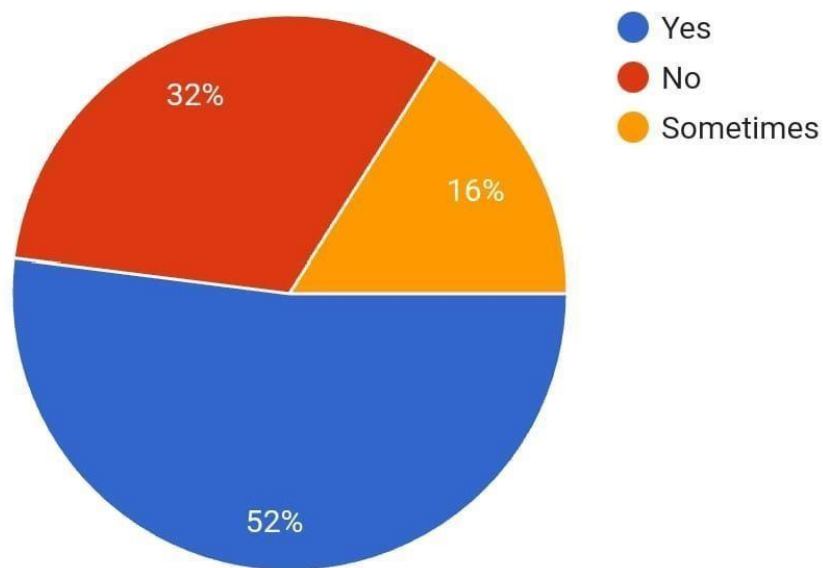


Interpretation :

Out of 100 responses 55 respondent do monthly review and make Changes in fixed income portfolio and 34 % people do quarterly Changes and review , 11 % people do rarely changes and review In fixed income investment .

24) Do you consider the tax credit rating of a fixed income security before investing in it ?

100 responses

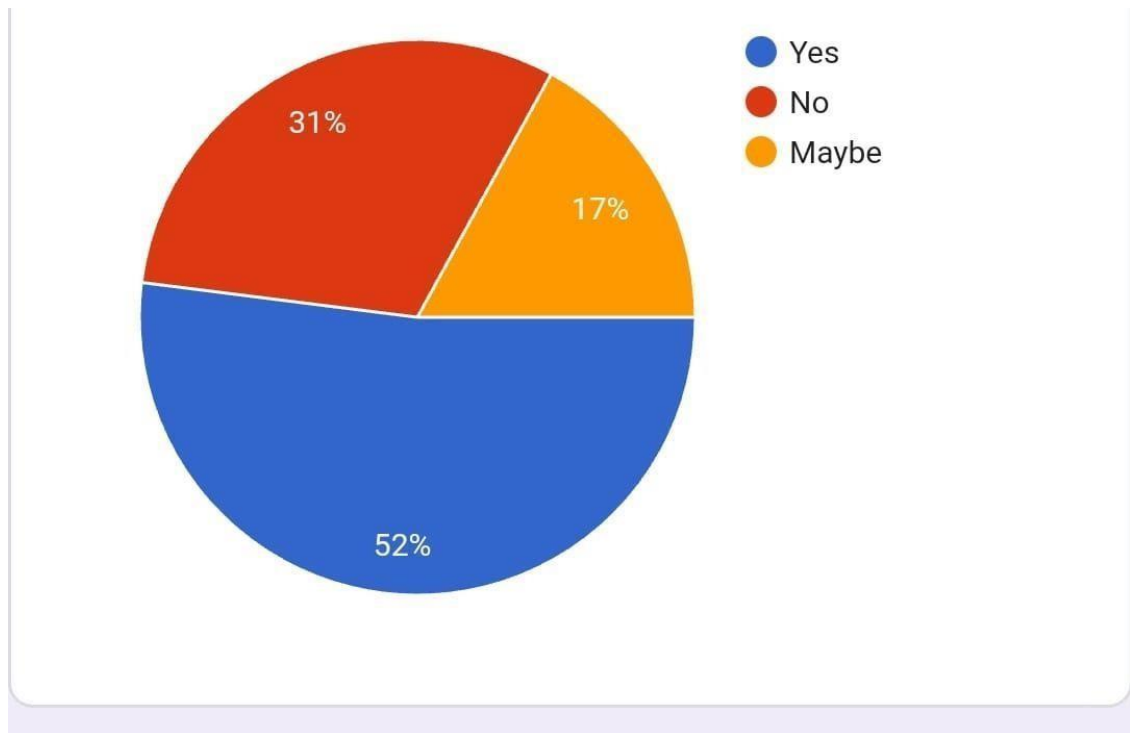


Interpretation :

Out of 100 responses 52 % people consider tax credit rating of a fixed Income securities before investing in it and 32 % respondent does not Consider the tax credit rating ,16 % respondent consider sometime .

25) Are you willing to invest in fixed income security with lower credit rating for Higher return ?

100 responses

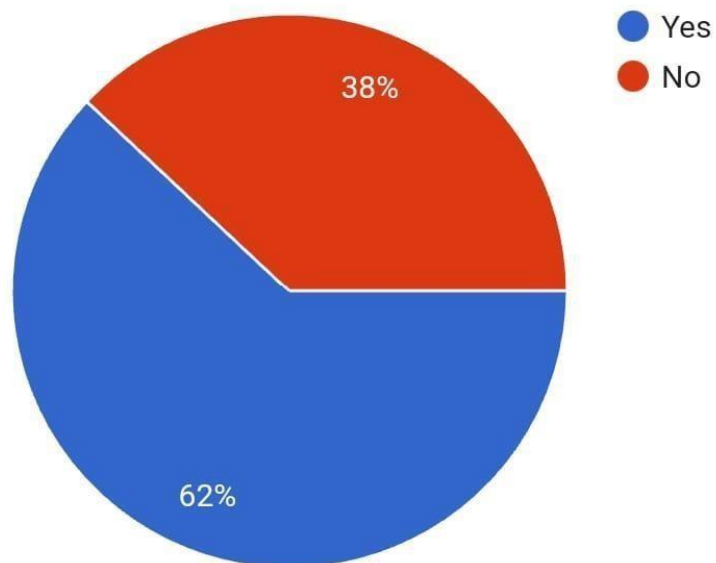


Interpretation :

52 % responses are invested in fixed income security with lower Credit rating for higher return and 31 % respondent does not in Vest in security who provide lower credit rating for higher return

26) Are you comfortable with the reinvestment risk associated with fixed income Securities ?

100 responses

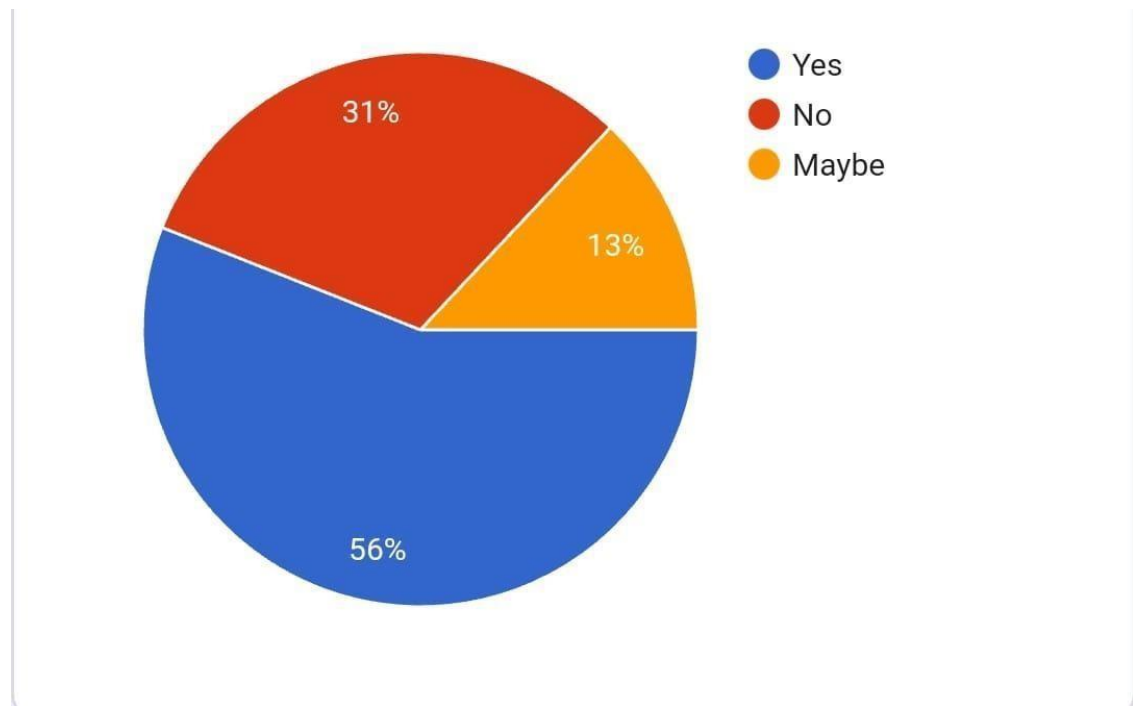


Interpretation :

62 % respondent are comfortable with reinvestment risk associated with Fixed income securities 38 % respondent are not comfortable with re-Investment risk .

27) Do you consider the tax implication while investing in fixed income securities ?

100 responses

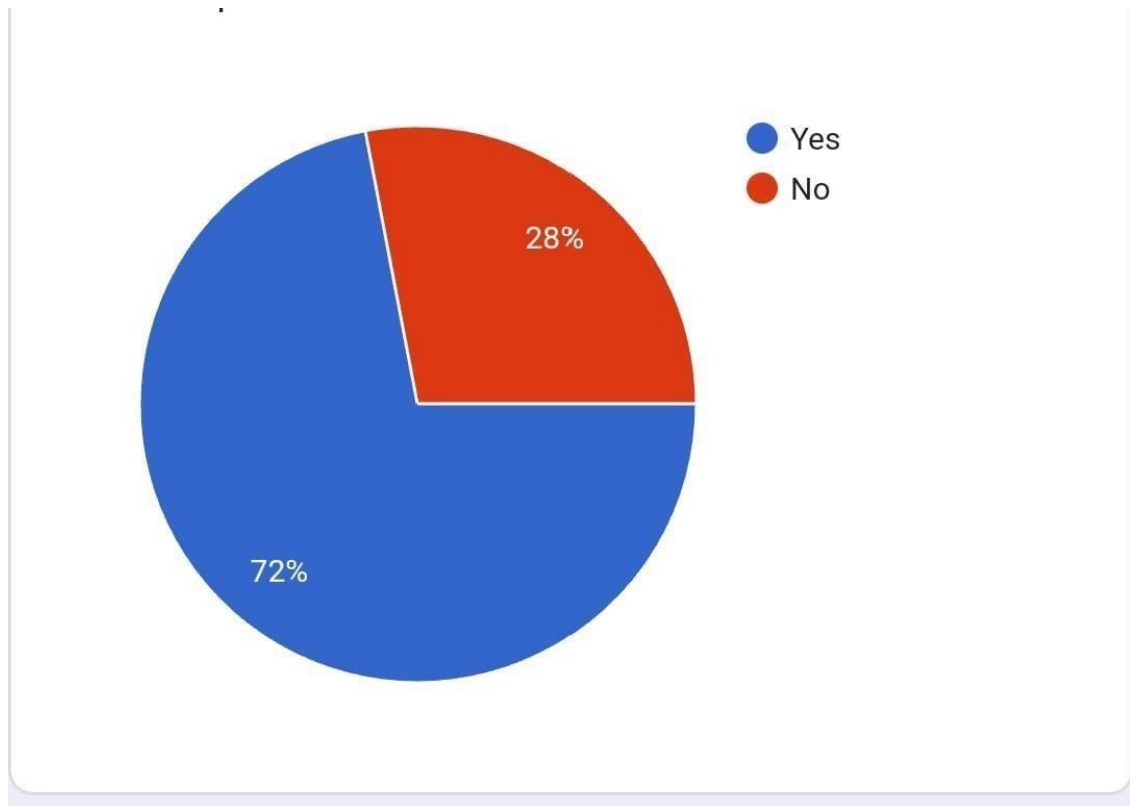


Interpretation :

56 % respondent are considering the tax implication where 31 % response
Would not consider tax implication while investing in fixed income
Securities.

28) Do you prefer fixed income securities that offer regular income payment or lump
Sum payment at maturity ?

100 responses

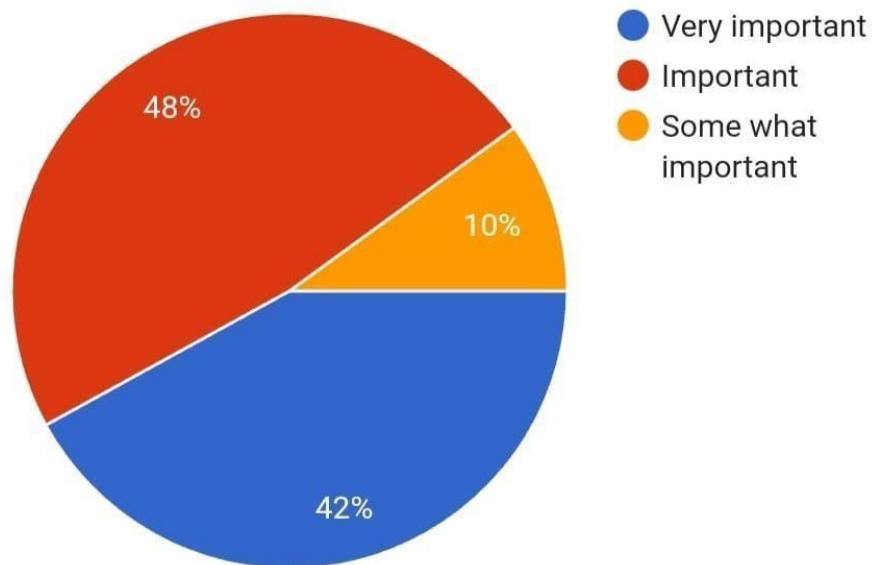


Interpretation :

72 % responses are prefer fixed income security that offer regular income
Payment at maturity whereas 28 % would not prefer regular income
Payment at maturity.

29) In your opinion how important are fixed income security in a diversified investment portfolio ?

100 responses

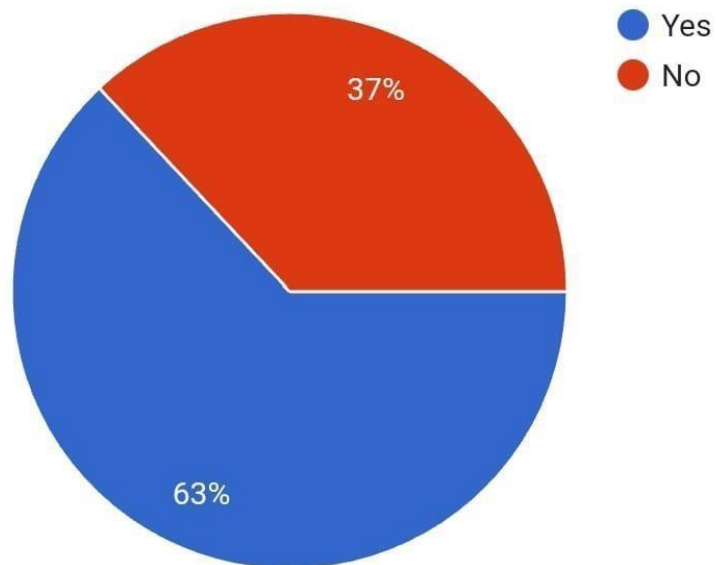


Interpretation :

42 % respondent are think that securities are important In diversified Investment portfolio whereas 48 % respondent think securities are very Imoortant , 10 % respondent think securities are some what important .

30) Have you ever used a financial advisor to help with your fixed income investment ?

100 responses



Interpretation :

Out of 100 responses 63 % people take financial advisor help to invest in Securities and 37 % respondent did not take any financial advisor help to Invest in securities.

7. Finding and Suggestions

7.1 Findings

After the survey of 100 samples and on the basis secondary data these are some of the findings

- There are wide variety of alternatives available in fixed income security market in India. All of them have different characteristics ,risk and returns.
- There are various factors that influence investors preference of fixed income security one of the major factor is credit risk and default risk.
- According to survey on an avg an investor invest 25- 50% of portfolio in fixed income securities for medium term,i.e 2-5 yrs.
- On an avg people expect returns from these investment to be between 5 to 10%
- On the basis of the survey most of the people think that bond debentures and govt securities are one of the best option to invest in fixed income securities.
- Advantages of investing in fixed income security are that it provides a fix source of income and the fact that its has less default risk as compared to equity instruments.
- Despite rise of all the current scams like il&fs PNB etc people still have hopes in indian fixed income security market but credit risk has become one of the major factors influencing their choice of instruments.
- One of the Disadvantage of fixed income security is that it provides lesser return as compared to alternative investment securities like equity instruments
- One of the limitation is that the economy is not aware of all the options available in fixed income security market such as company deposits .A bias in people's behavior is seen towards bonds Bank deposits, G-secs, Debentures .
- Debt market is an important platform enable mobilisation of funds, to maintain liquidity in the market and helps in implementation of monetary policies in the economy

7.2 Suggestions

Every investor invests either in Equity or Debt instruments or in both with the purpose generating higher returns with low risk. Optimum level of distribution of Debt an investment portfolio can be maintained by considering the following factors deciding between different fixed income securities

- **Investment objectives** - The investor's objective could be to generate more income or create more wealth. Investors looking to generate income through their investments should invest in debt fund because it provides more certainty of return.
- **Investment duration** –If investors are ready for long term investments, equities is a good option. For short term duration like 5 years or less than 5 years debt fund are better.
- **Returns expected** –Current research study shows that investors choose an asset class with unrealistic expectations. Returns comes with varying degrees of risk and uncertainty. On a long-term basis, average returns for debt are in the region of 9%
- **Risks involved**- Risks involved should be defined in line with the investment objective and returns expected. Investments in debt are usually less risky and a long term investment in debt provides usually 8-10% returns

Before investing in any of the fixed income securities one should take above factors into consideration also having full knowledge about the securities its risk, return, characteristics etc should be known.

8. Conclusion

Liquidity vs. returns

➤ **Low liquidity, low returns:**

This investment option is suitable for those who do not want to take risk and are satisfied with low returns. Bank deposits are good are the good example of such types of funds.

➤ **Low liquidity, moderate returns:**

An investor with this objective can invest in RBI bonds, Co.FD's or Co. Debentures where he could expect moderate returns and low liquidity. Here RBI bonds are low risky as compared to Company fixed deposit and Co. Debentures.

➤ **Moderate liquidity, Moderate returns:**

Those investors who want moderate liquidity and moderate returns. Government securities are the good options. These investments are with minimum lock in period with impressive returns.

➤ **High liquidity, high returns:**

Mutual fund schemes are the best options for the investors with high liquidity appetite along with a high return. This investments options are highly attractive and fast for making money.

Risk and return:

➤ **Low risk, low returns (Short investment horizon) :**

With this investment objective the investor has the option of short term bank deposits for 1-6 months when he could expect returns of 6-8% p.a depending on the tenure.

➤ **Low risk, Moderate returns (Investment horizon of at least 1 year):**

An investor with this objective can invest in Company/NBFC deposit, which are 'AAA' rated. This will fetch him returns of around 9% p.a with moderate liquidity.

The other options are government securities along with high Safety and liquidity. However those have limited tax benefits. The other relief bonds are backed by the government of India. However the liquidity is low and locked for at least 5 years.

➤ **Moderate risk, moderate returns (Investment horizon of 1 year) :**

An investor with this objective can opt for company deposits with moderate safety i.e. 'AA' rated that will fetch him over 7% returns. However the liquidity is very low as the investment is locked for 5 years.

➤ **Moderate risk, moderate returns:**

An investor with this objective can opt for company deposits with moderate safety. The option is the income which can give returns and tax benefits, as the dividends from mutual funds are tax free in the hands of investor. However these funds can be very volatile in short term.

Development of long-term debt markets is critical for the mobilization of the huge magnitude of funding required to finance potential businesses as well as infrastructure expansion.

Despite a plethora of measures adopted by the authorities over the last few years, India has been distinctly lagging behind other developed as well as emerging economies in developing its corporate debt market. The domestic corporate debt market suffers from deficiencies in products, participants and institutional framework.

For India to have a well-developed, vibrant, and internationally comparable corporate debt market that is able to meet the growing financing requirements of the country's dynamic private sector, there needs to be effective co-ordination and co-operation between the market participants that include investors and corporates issuing bonds as well as the regulators. Issues such as crowding of debt markets by government securities cannot be addressed by market participants and regulators alone. Better management of public debt and cash could result in a reduction in the debt requirements of the government, which in turn would provide more market space and create greater demand for corporate debt securities.

Clearly, the market development for corporate bonds in India is likely to be a gradual process as experienced in other countries. It is important to understand whether the

regulators have sufficient willingness to shift away from a loan-driven bank-dependent economy and also whether the corporations themselves have strong incentives to help develop a deep bond market. Only a conjunction of the two can pave the way for the systematic development of a well functioning corporate debt market.

A vibrant debt market provides an alternative to conventional bank finances and also mitigates the vulnerability of foreign currency sources of funds. From the perspective of financial stability, there is a need to strengthen the debt market. Limited Investor base, limited number of issuers and preference for bank finance over bond finance are some of the other obstacles faced in development of a deep and liquid debt market.

9.

Bibliography

- H MacDonald, “The Rise of Mortgage-Backed Securities: Struggles to Reshape
- Access to Credit in the USA”, Volume: 28 issue: 7, page(s): 1179-1198 , Issue
- published: July 1, 1996
- Dr. Rina das, “An Empirical Study on Corporate Bond Market in Indian
- Economy” Published- 27 December 2017
- Hema P. Gwalani, “Analytical Study of the Awareness Level of Corporate
- Bond
- Market in India among Retail Investors”, Volume-4, Issue-1, March 2015
- Ms. Tanvi singhal, “A study of factors influencing switching behavior of fixed
- deposit investors of Indian banks”, Published: 2015
- ➤ Basudeb Guha-KhasnobisSaibal Kar, “The Corporate Debt Market in India: An
- Analytical Study of, Macroeconomic and institutional issues, Published :2008
- ➤ Roger McIntosh, Vijay A. Murik, “The role of fixed income as a part of
- diversified investment strategies”, published April 2012.
- Pooja Nemey, “Indian Corporate Bond Market: An Analysis of Growth and
- Impact of Macroeconomic Determinants” Volume: 23, issue: 3, page(s):
- 244254, Published: September 1, 2019.
- <http://thepayoffprinciple.com/top-4-benefits-of-investing-in-fixed-income-securities/>
- <https://www.thebalance.com/what-is-fixed-income-3306250>
- [https://www.adityabirlacapital.com/abc-of-money/what-are-the-types-of-fixedincome-](https://www.adityabirlacapital.com/abc-of-money/what-are-the-types-of-fixedincome-securities-in-india)
- [securities-in-india https://www.ijbmi.org/papers/Vol\(6\)12/Version-](https://www.ijbmi.org/papers/Vol(6)12/Version-3/H0612036070.pdf)
- [3/H0612036070.pdf https://www.investopedia.com/ask/answers/021615/how-does-](https://www.investopedia.com/ask/answers/021615/how-does-inflation-affectfixedincome-investments.asp)
- [inflation-affectfixedincome-investments.asp](https://www.investopedia.com/ask/answers/021615/how-does-inflation-affectfixedincome-investments.asp)

A study on investor's preference in fixed income Securities.

1. Gender

2. Age

- Below 25
- 25-30
- 35-40
- Above 50

3) Occupation

- Student
- Business
- Service
- Home maker

4)Income Group

- Below 15
- 15 K to 25 K
- 25 K to 50 K
- Above 50 K

5) Do you invest in fixed income securities ?

- Yes
- No

6) Which type of fixed income security do you invest in ?

- Bonds
- Debentures
- Govt securities
- Bank Deposits

7) Which among the following security do you invest in ?

- Bonds
- Debenture
- Govt. security
- Bank deposits

8) After recent scams like ILAND fs, PNB do you still Belief that fixed income security are safer and better than other investing avenue ?

- Yes
- No
- May be

9) Do you think global socio economic condition have an impact on indian market of fixed income securities ?

- Yes
- NO

10) Have you experienced any challenges in investing fixed income security ?

- Yes
- No

11) Have you experienced any losses in your fixed income security In the past ?

- Yes
- No

12) Are you satisfied with your return which you invest In fixed income securities ?

- Yes
- No

13) What proportion of your portfolio would you like to invest in fixed income securities ?

- Yes
- No

14) How much return do you expect from fixed income investment ?

- Yes
- No
- May be

15) How soon do you expect to need the money which you are invest in securities ?

- 1 to 3 yrs
- 4 to 8 yrs
- 8 to 10 yrs above

16) Do you think corporate bonds as a fixed income investment option is good for investing ?

- Yes
- No

17) Have you ever invested in real estate investment trust as a fixed income option ?

- Yes
- No

18) Do you think changes in interest rates affect your fixed income investment ?

- Yes
- No
- May be

19) Do you think uses of technology in fixed income securities is really affected ?

- Yes
- No
- May be

20) How do you feel about taking on risk when investing investing In fixed income securities ?

- I am comfortable with taking on some risk
- I prefer low risk investment

- 21) Do you prefer short or long term fixed income investment ?
- Short term
 - Long term
 - No preferences
- 22) Would you consider investing in high yield or junk bonds ?
- Yes
 - No
 - Other
- 23) How often do you review and make changes of fixed income portfolio ?
- Monthly
 - Quarterly
 - Rarely
- 24) Do you consider the tax credit rating of a fixed income securities before investing in it ?
- Yes
 - No
 - Sometimes
- 25) Are you willing to invest In securities with lower credit rating for higher return ?
- Yes
 - No
- 26) Are you comfortable with the reinvestment risk associated with fixed income securities ?
- Yes
 - No
- 27) Do you consider the tax implication while investing fixed income securities ?
- Yes
 - No
- 28) Do you prefer fixed income securities that offer regular income payment or lump sum payment at maturity ?

- Yes
- No

29) In your opinion how important are fixed income securities in a diversified investment portfolio ?

- Very important
- Important
- Some what important

30) Have you ever used a financial advisor to help with your fixed income investment?

- Yes
- No