Liquidity Credit Puzzle, Defect of Risky of corporate Bonds in India

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ABSTRACT: Bonds are high-security debt products that allow a company to raise money and meet its capital needs. It is a type of debt obtained by borrowers from private investors. Bonds have been around for thousands of years, with the earliest examples reaching back to 2400 BC. Bonds have become increasingly popular throughout the years, with both governments and corporations employing them for a variety of purposes. The first known bond comes from 2400 B.C., when a stone was unearthed in Nippur, Mesopotamia, which is today Iraq. The principle's grain payments were guaranteed by this bond, and the surety bond ensured restitution if the principal failed to pay. Corn was the currency in use at the time. The Bank of England issued the first government bond in 1693 to generate funds for a war against France. These initial bonds were a combination of lottery and annuity bonds.

Key Words : Bonds, Equities, Liquidity, Risk, Foreign Market.

INTRODUCTION

Bonds have become increasingly popular throughout the years, with both governments and corporations employing them for a variety of purposes. The first known bond comes from 2400 B.C., when a stone was unearthed in Nippur, Mesopotamia, which is today Iraq. The principle's grain payments were guaranteed by this bond, and the surety bond ensured restitution if the principal failed to pay. Corn was the currency in use at the time. The Bank of England issued the first government bond in 1693 to generate funds for a war against France. These initial bonds were a combination of lottery and annuity bonds. Organisation, including companies, governments, municipalities and other entities, issue bonds for investors in primary markets. The corpus thus collected is used to fund collected is used to fund business operations and infrastructural development by companies and governments. Investors purchase bonds at face value or municipal, which is returned at the end of fixed tenure. Issuers extend a percentage of the principal amount as periodical interest at fixed or adjustable rates.

Classification of Bonds

- Face value**:** Is the money amount the bond will be worth at maturity; it is also the reference amount the bond issuer uses when calculating interest payments.
- Coupon dates**:** are the dates on which the bond issuer will make interest payments. Payments can be made in any interval, but the standard is semi-annual payments
- The maturity date: is the date on which the bond will mature and the bond issuer will pay the bondholder the face value of the bond.
- The issue price: is the price at which the bond issuer originally sells the bonds.
  Like many investments, bonds balance both risk and reward. Bonds that are lower risk will pay lower interest rates; bonds that are riskier pay higher rates in exchange for the investor giving up some safety.

1. U.S. Treasury bonds: These bonds are backed by the federal government and are considered one of the safest types of investments. The federal government and are considered one of the safest types of investment. The first U.S Treasury bonds, which were initially called Liberty Bonds," 1917, the first Liberty Loan Act authorized the issue of $5 billion worth of bonds at 3.5 percent interest three weeks after the united states declared war on Germany.
2. Corporate bonds: companies can issue corporate bonds when they need to raise money. For example, if a company wants to build a new plant it may issue a bond and pay a stated rate of interest to investors until the bond matures and the company repays the investor the principal amount that was loaned. Unlike owning stock in a company, investing in a corporate bond does not give you ownership in the company itself.
3. Municipal bonds: Municipal bonds, also called minis are issued by states, cities, countries and other non-federal government entities. Similar to how corporate bonds are used to fund company projects or venturis municipal bonds are used to funds state or city projects like building schools or highways. Municipal bonds can vary in term: short -term bonds will pay back their principal in one to three years, while take over ten years to mature.

Economic progress is aided by a well-developed corporate bond market. It provides an alternate source of finance that complements the banking system in order to address the needs of the corporate sector in terms of raising cash for long-term investment. This segment is thought to operate as a reliable source of finance in the face of volatile equity markets, as well as allowing businesses to adjust their asset and liability portfolios.to reduce the Risk maturity. It also helps in the diversification risk in the system. In view of huge investment requirement for infrastructure sector, the presence of a well-developed corporate Bond market assumes significance in India Corporate Bond market is likely to be more beneficial for business having longer term cash flows, where investors may be warry of risk associated with equity and long-term financing from banks may not be easily available. corporate bond market can make both task easier furthermore, India is in need of US$I trillion in the current five-year plan for financing its infrastructure. Corporate bond can be helpful in India.

Objective:
1. To understand the current practice of corporate bonds
2. To study the liquidity credit puzzle default risk of bond
3. To find out customers perception about liquidity of the bonds:

LITERATURE REVIEW

APEC (1999): By analysing bond markets in industrialised nations, we were able to compile a list of necessary qualities for effective bond market development that APEC members might use in their own countries. Sequencing (which referred to the plan of development monitoring and regulation to safeguard investors), market infrastructure (which referred to the rules, regulations, issuing procedures, and the market's modus operandi), and market reliance are some of these features.

Sharma (2001): Investigated Southeast Asia's corporate bond markets and concluded that corporate sector and banking reforms, as well as the enforcement of legal processes and increased business transparency, were required to increase the attractiveness of these markets.

Asian Crises, Batten and Kim (2001): In order to improve bond markets in countries suffering from, a study of bond markets in countries suffering from recommended that these countries focus more on providing an enabling environment, improving corporate governance, increasing the role and reliability of credit ratings, creating a benchmark yield curve, improving investor roles, broadening private placement, providing real-time delivery systems, and strengthening regulatory framework.

Fabella and Madhur (2003): studied the bond market in East Asia and suggested that establishing a stable macro-environment and healthy government bond market besides completing the post-crisis agenda for restructuring the banking sector, improving corporate governance, enhancing the regulatory framework for this market, rationalizing the tax policy as well as broadening the investors base and providing incentives for the growth of regional bond market canters are necessary for these countries to be forward a sustainable bond market.

Gyntelberg et al. (2005):: While researching corporate bond markets in Asia, gyntelberg identified the major impediments to the development of corporate bond markets in this region. While primary markets relied on quasi-government issuers, secondary markets were hampered by small investor bases, insufficient microstructures, and information asymmetry.

Eichengreen and Luengnaruemitchai (2004): is one of the few researchers who has conducted a thorough examination of the factors influencing corporate financing through bond markets. These authors identified 15 determinants of bond market development, including economic size and natural openness.

Ringui (2012): Factors exploited in Kenya's corporate bond market by taking into account the impact of the corporate bond market's development level, the political, macroeconomic environment, supervisory and regulatory, effective market structure, and diverse intermediaries.

Methodology

The descriptive research method was used to achieve the project's objective. The information needed to complete the study's objective was gathered from a variety of primary and secondary sources. This study used a descriptive and analytical approach to evaluate and analyse the problem under consideration. The purpose of this research is to raise consumer awareness of bonds.

Primary data:

Primary and secondary data were gathered for the purposes of this study. The questionnaire was used to collect primary data in this study. This questionnaire was created with the study's objectives in mind.

Secondary data: It is information that has already been gathered by someone or an organisation for another purpose or research study. Data for the study will be gathered from a variety of sources, including books, journals, and internet sources.

Sample Size:

A sample size 100 were collected using the structured questionnaire

Surveys:

A survey is made up of a series of multiple-choice questions. The questionnaire and Google forms were used to collect data for this survey method.

This data was analysed using a simple percentage method.

Data preparation:

The first step in data preparation will be a preliminary check of all questionnaires for completeness. The collected data will be edited, grouped, and organised in accordance with the study's requirements.

Statistical analysis:

In this study, Anova will be used to analyse the chi square test. The use of various statistical techniques for data analysis will be determined by the type of data collected. Various statistical tools can be used. Thus, the precise statistical test would be determined following the preparation of the data collection instrument and the collection of actual data for the research.

RESULTS

Data analysis:

The information gathered from multiple respondents must be analysed before conclusions can be drawn. As a result, efforts have been undertaken in this chapter to analyse and collect data on "Liquidity credit conundrum, fault of hazardous corporate bonds in India."

All of the obtained data was first presented in a tabular format, and then it was analysed using percentage and pie charts.

Table no 1: Gender

Sl. No	Gender	Respondents	Percentage%
1	Male	50	50
2	Female	50	50

|	Total	100	100
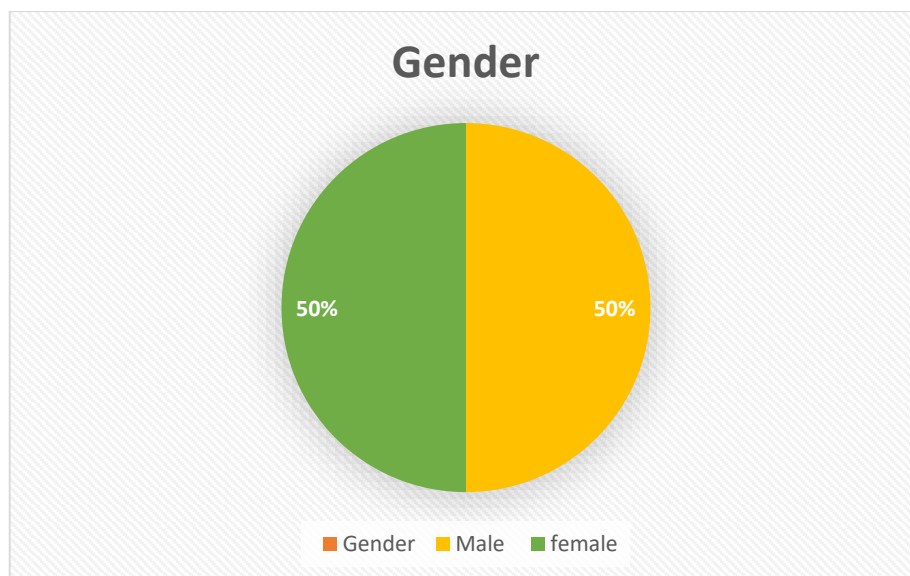
Interpretation:
According to the table and data above, 50 percent of male respondents and 50 percent of female respondents are equal.
Inference:
From this analysis we can see that equal respondents both male and female.

Table No 2: Educational Background

| Sl. No	Educational qualification	Respondents	Percentage %
1	Primary	1	1
2	Secondary	11	11
3	Graduate	32	32
4	PG	52	52
5	Professional dgree	4	4
	Total	**100**	**100**
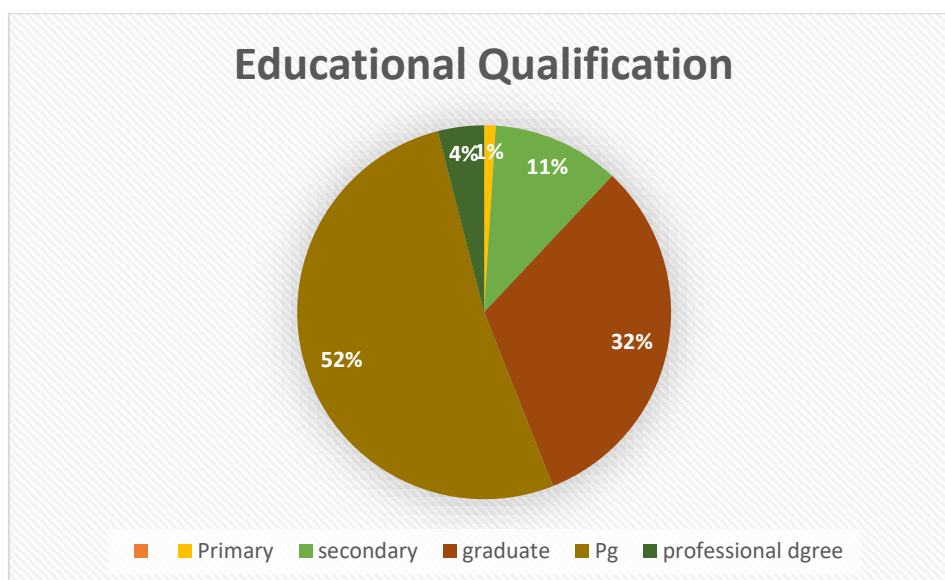
Interpretation:
According to the above table and numbers, the majority of responders (52%) are postgraduates, with 32 percent being graduates, 11 percent secondary, 4 percent professional degrees, and 1 percent primary.
Inference:
High majority of respondents are post graduate.

Table No: 3 Age

| Options	Respondents	Percentage (%)
Below 30	87	87
31-40	12	12
41-50	1	1
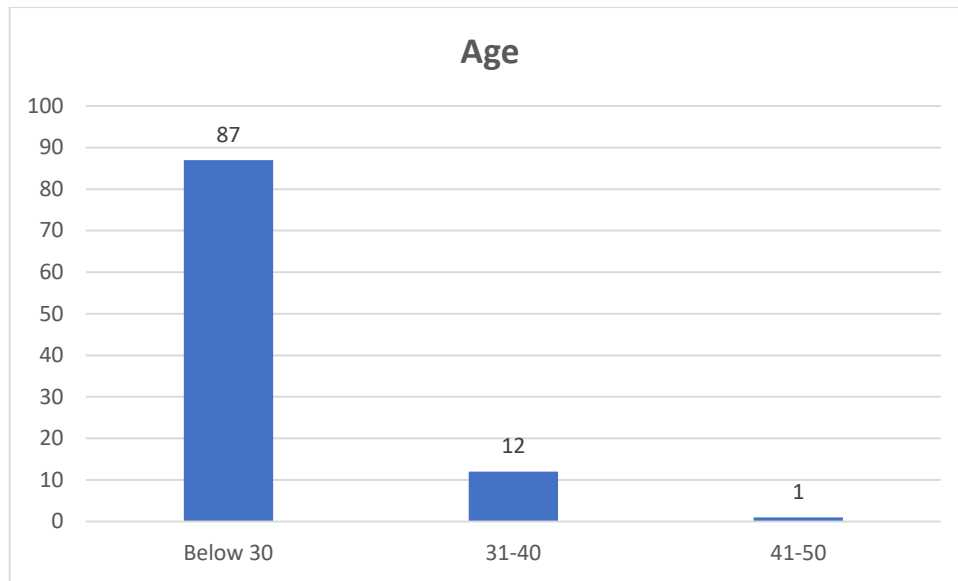
Interpretation

From the above table and figures it is that majority respondents that is 87% are belongs to below 30years, where as 12% belongs to 31-40 years, and 9% belongs to 41-50 years.

Inference:

From this it clear that majority of the respondents fall under the age group of below 30 years.

Table No 4: Marital status

| Options	Respondents	Percentage (%)
Married	9	9
Unmarried	91	91
Total	100	100
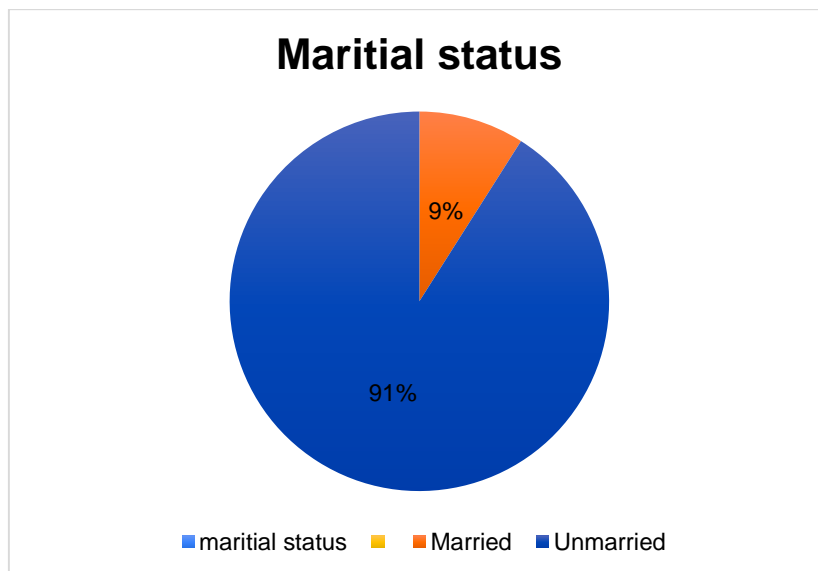
Interpretation

From the above table and figures it is clear that majority of respondents are un married i.e 91% and rest of the 9% are married.

Inference:

Therefore, according to this observation maximum respondents are un married.

Table No 5: occupational status

| Particulars	Respondents	Percentage
Self-employed	7	7
Business	4	4
Salaried	42	42
Profession	8	8
Retired	1	1
Student	38	38
Total	**100**	**100**
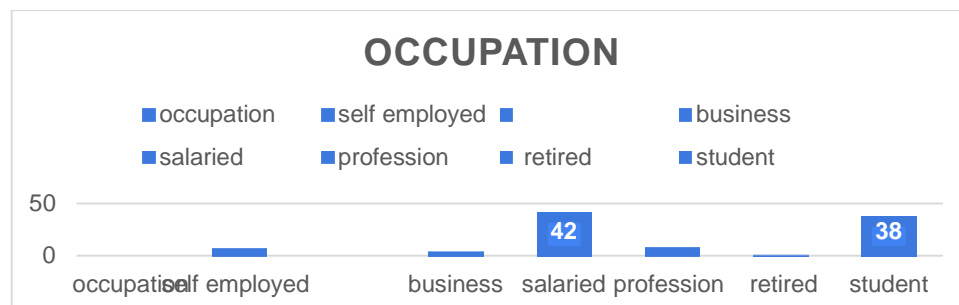
Interpretation:
From the above table and figure, it is evident that the majority of respondents (42%) are salaried, with 38 percent being students, 8% being professionals, 4% being business owners, and 1% being retired.
Inference:
As a result, it can be stated that the majority of respondents are anxious about their status as a student.

Table No : 6 Annual Income

Options	Respondents	Percentage
Up to 100000	58	58
100001 to 300000	33	33
300001 to 500000	5	5
Above 500000	4	4
Total	**100**	**100**
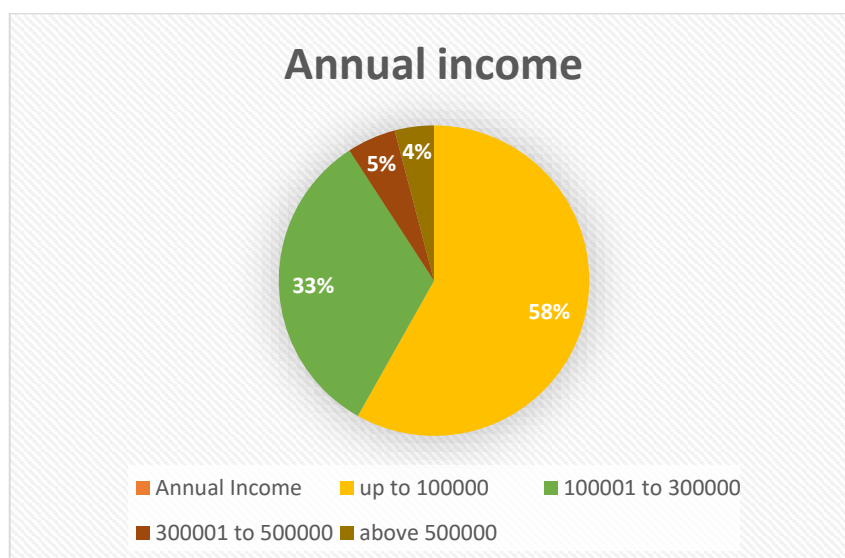
Interpretation:
According to the above table and numbers, the bulk of replies are up to 100000, with 33 percent between 100001 and 300000, 5% between 300001 and 500000, and 4% above 5000000.
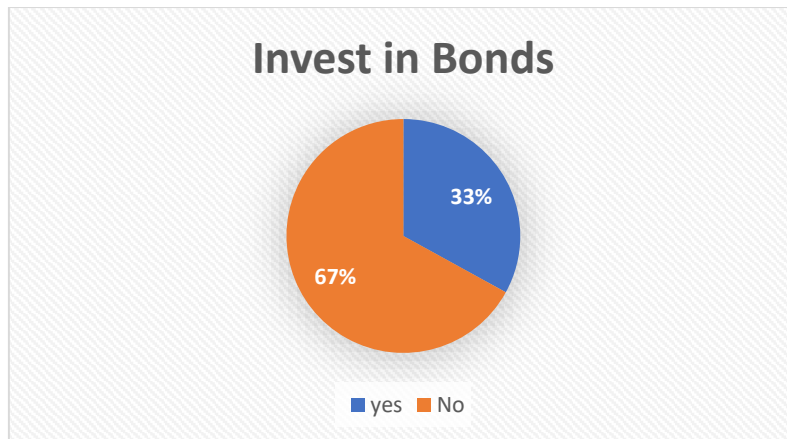**Inference:**
We can tell from this research that the majority of the responders are 58 percent.
Table no: 7   Do you invest in Bonds?

Options	Respondents	Percentage (%)
Yes	33	33%
No	67	67%

Total	100	100

Interpretation

From the above Table & figures show that out of 100 respondents. There is 67% of respondents is invested in Bonds and 33 % of respondents is no invested in bonds.

Inference:

From this table & figures it is clear that majority of respondents is invested in Bonds.

Table no :8 If no, what is the reason?

| Options	Respondents	Percentage (%)
Not aware	24	24
Feel risky	28	28
Financial issues	27	27
Other	21	21
Total	**100**	**100**

Interpretation:

The above table and numbers demonstrate why Bonds are not a good investment. According to the table and numbers, 28% of people feel risky, 27% have financial troubles, 24% are unaware, and 21% have other concerns.

Inference:

From the above table & figures observed that 28% of respondents is feel risky.

Table no 9: How do you come to know about Bonds?

Options	Respondents	Percentage
News paper	21	21
Brokers	10	10
Family	17	17
Friends	22	22
Internet	30	30
Total	**100**	**100**

KNOW ABOUT BONDS

■ Series1
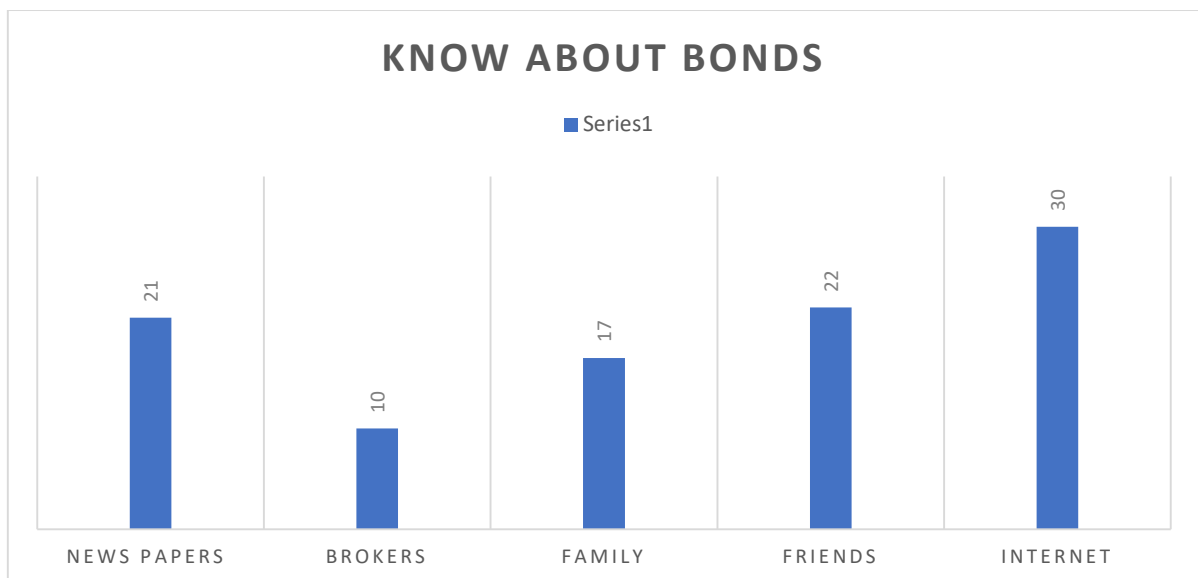
Interpretation:
From the above table and figures it shows that out of 100 respondents 30% of respondents by the internet 22% of respondents by the friends, 17% of respondents by the Family and 10% of respondents by the Brokers.

Inference:
It is clear that the majority of respondents use the internet.

Table no 10: what is the main reason you are invested in bonds?

Options	Respondents	Percentage (%)
I'm not invested in bonds	56	56
To minimize the volatility in my portfolio	8	8
Low- risk	15	15
Diversification	2	2
Reliable income	10	10
Other	9	9
Total	**100**	**100**

Reason for invest in Bonds

■ Im not invested in Bonds
■
■ To minimize volatility in my portfolio
■
■
■ Low risk
■ Diversification
■ Reliable income
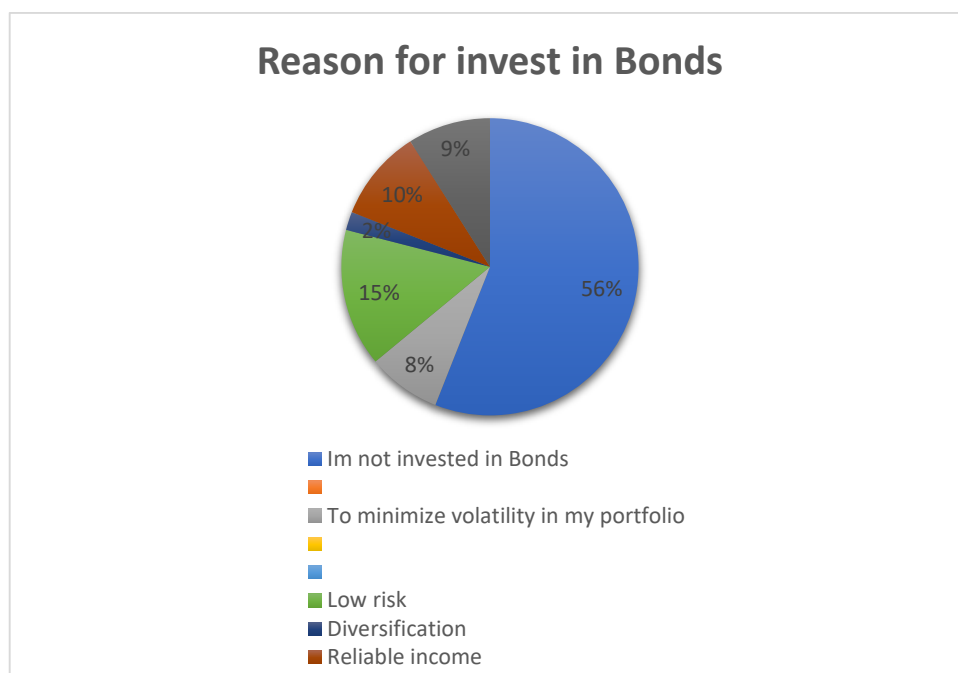
Interpretation:
From the above table & figures it is clear that maximum respondents are belongs to 56% of I'm not invested in Bonds, where as 15% of respondents low risk, 10% of respondents is reliable income, and 9% of the respondents are other and 8 % of respondents are To minimize volatility in my portfolio, 2% of the respondents are diversification.

Inference:

Thus, it can be concluded that High respondents is 56 % of Im not invested in bonds and less respondents are 2 % of diversification.

Table no: 11 in which bond you have invested?

| Options	Respondents	Percentage (%)
Corporate Bonds	48	48
Convertible Bonds	23	23
Callable Bonds	10	10
Term Bonds	19	19
Total	**100**	**100**
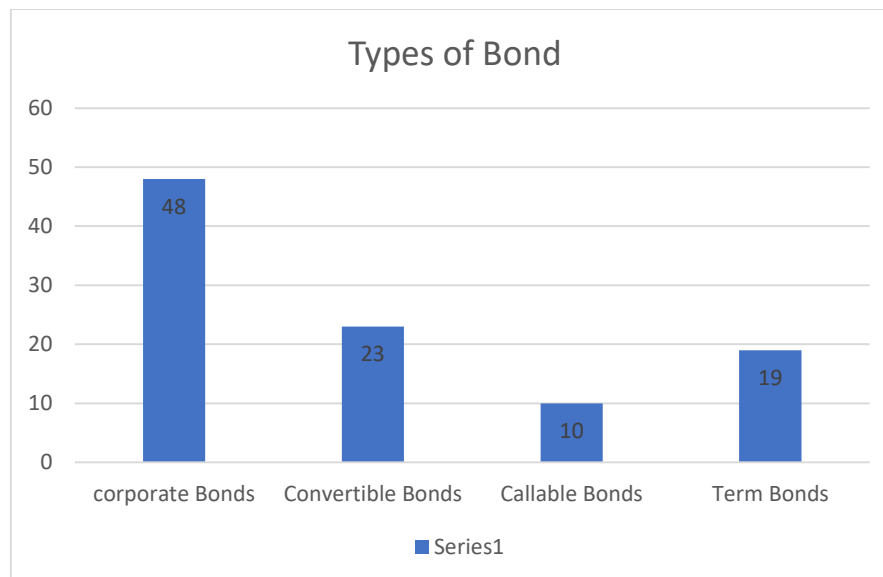
Interpretation:

From the above table& figures it shows out of 100 respondents there are 48% of respondents is corporate bond, 23% of respondents are convertible bonds,19% of the respondents are term bonds and 10% of respondents are callable bonds

Inference:

From this analysis we can see that majority respondents are corporate bonds.

Table no: 12 what is the risk associated Bonds?

| Options	Respondents	Percentage (%)
Inflation risk	39	39
Interest rate risk	31	31
Liquidity risk	17	17
Credit risk	13	13
Total	**100**	**100**
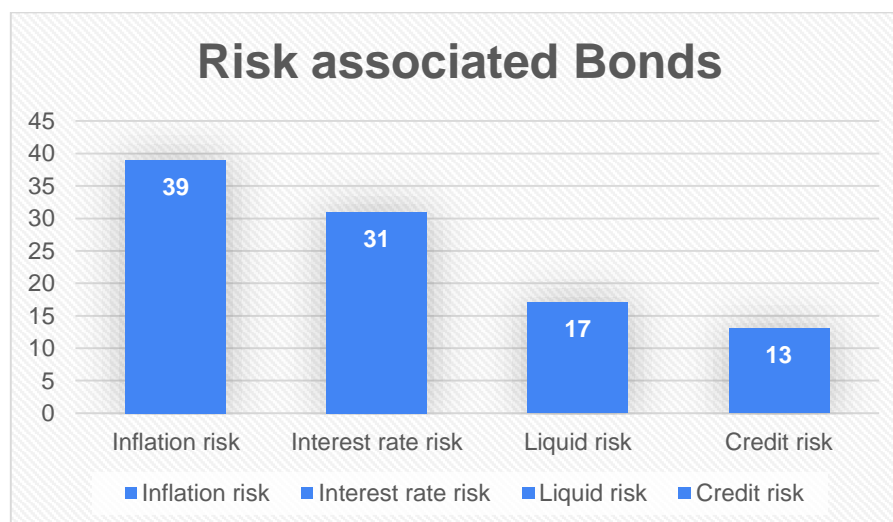
Interpretation:

The risk connected with bonds can be seen in the table and figures above. Inflation risk affects 39% of respondents, interest rate risk affects 31% of respondents, liquidity risk affects 17% of respondents, and credit risk affects 13% of respondents.

Inference:

Thus, it is concluded that majority respondents are 39%

Table no: 13 Roughly what percentage your portfolio is allocated to bonds?

| Options	Respondents	Percentage (%)
0-20(%)	38	38
20-40(%)	36	36
41-60(%)	16	16
61-80(%)	9	9
81-100(%)	1	1
Total	**100**	**100**
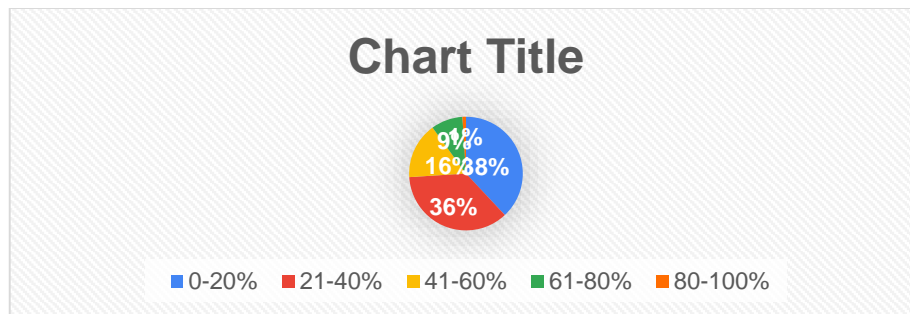
Interpretation:

From the above table and figures it shows the out of 100 respondents are 38% of respondents are 0-20%, 36% of respondents are 21-40%, and 16% of the respondents are 41-60% and 9% of respondents are 61-80% and 1 % of respondents are 80-100**%.**

Inference:

The above table & figures it shows high majority respondents are 0-20%

Table no :14 what bonds are you mostly invested in?

| Options	Respondents	Percentage (%)
Treasury Bonds	24	24
Corporate Bonds	45	45
High yield Bonds	17	17
Municipal Bonds	4	4
International Bonds	10	10
Total	**100**	**100**
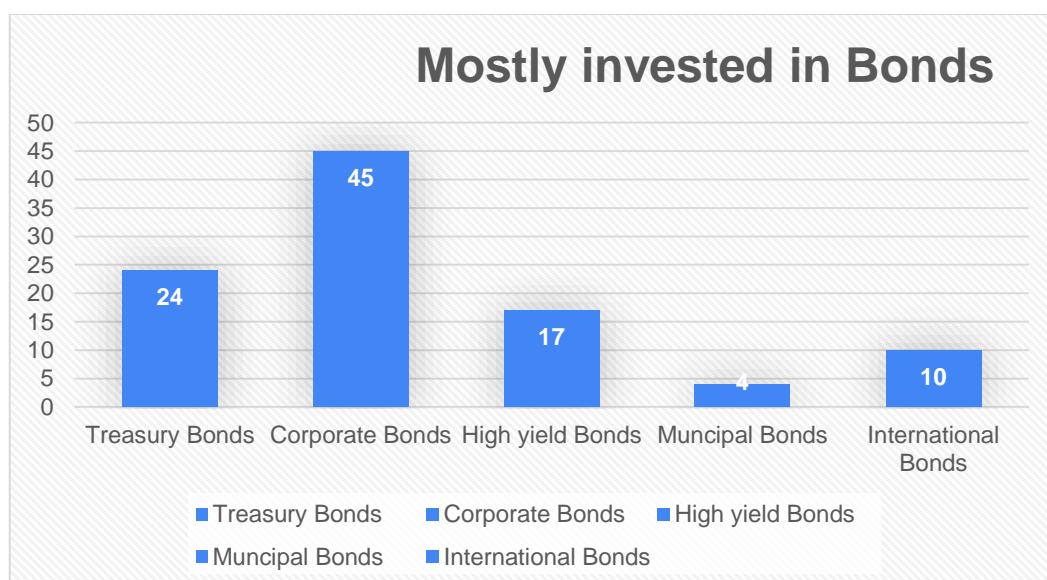
Interpretation:

From the above table figures it shows out of 100 respondents are 45% of respondents are corporate bonds,24% of respondents are treasury bonds, 17% of respondents are High yield Bonds ,10% of respondents are International Bonds,4% of respondents are Municipal Bonds.

Inference:

From this table & figures it is clear that the respondents fall under the 45% of corporate bonds.

Table no: 15 if you were starting a portfolio from scratch would you allocate a larger or smaller portfolio of it bonds than your current portfolio?

| Options	Respondents	Percentage (%)
I would allocate a large portion to bonds than my current portfolio	40	40
I would allocate a smaller portion to bonds than current portfolio	33	33
I would allocate a same portion to bonds as my current portfolio	11	11
Other	16	16
Total	**100**	**100**
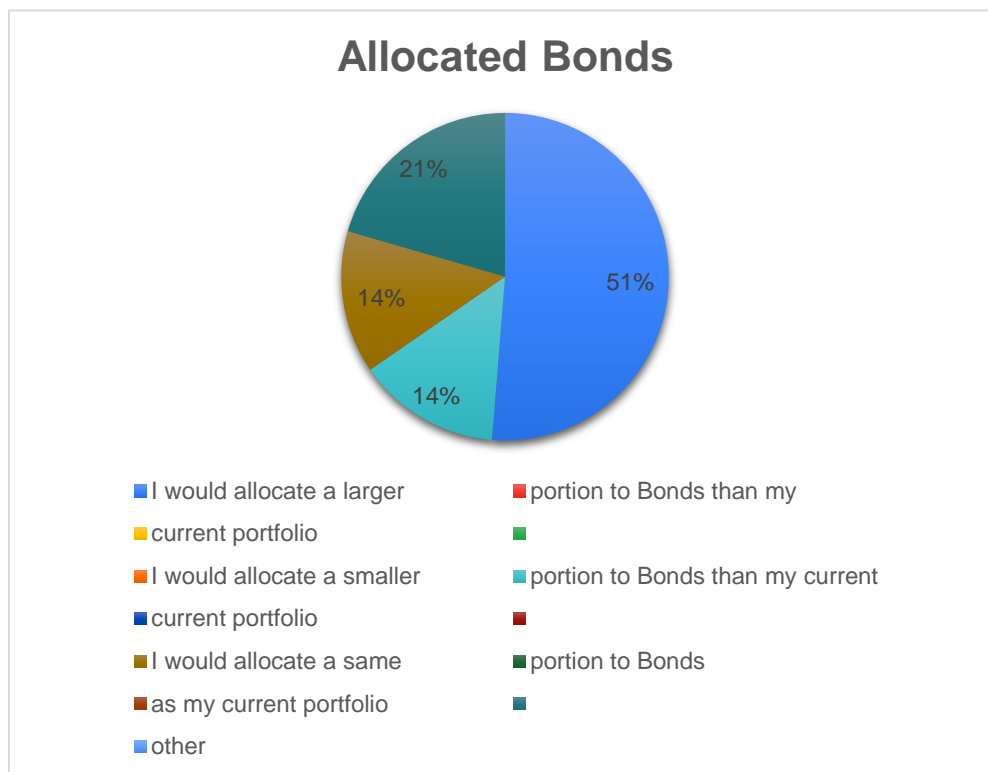
Interpretation:

From the above table & figures it shows out of 100 respondents 40% I would allocate a larger portion to bonds than my current portfolio 33% I would allocate a smaller portion to bonds,16% other ,11%current portfolio.

Inference:

Thus, it is concluded that high respondents are 40% I would allocate a larger portion to bonds less respondents are 11% current portfolio.

Table no 16: How confident are you that you understand exactly how bonds Work?

| Options	Respondents	Percentage (%)
Very confident	10	10
Confident	35	35
I'm not sure	45	45
Not confident at all	10	10
Total	**100**	**100**
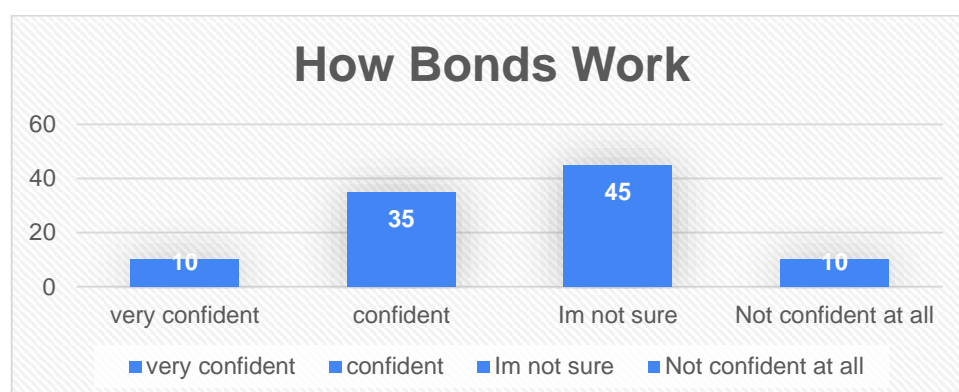
Interpretation:
From the above table & figures it shows that how bonds work. 45% of respondents are Im not sure 35% of respondents are confident, equal respondents are very confident and not confident at all

Inference:
From table & figures we can see that majority respondents are I'm not sure.

Table no: 17   Are you interested in learning more about how bonds and the bond market work?

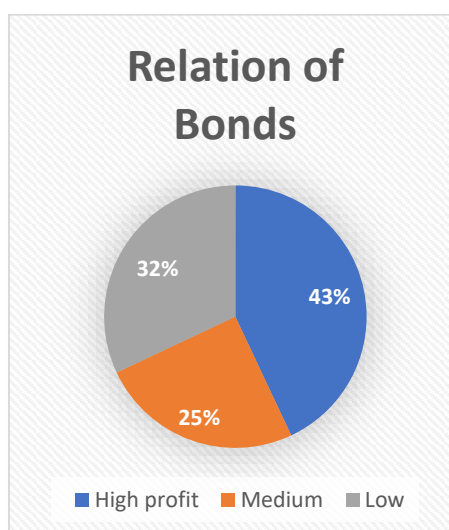| Options	Respondents	Percentage (%)
Yes	76	76
No	24	24
Total	**100**	**100**
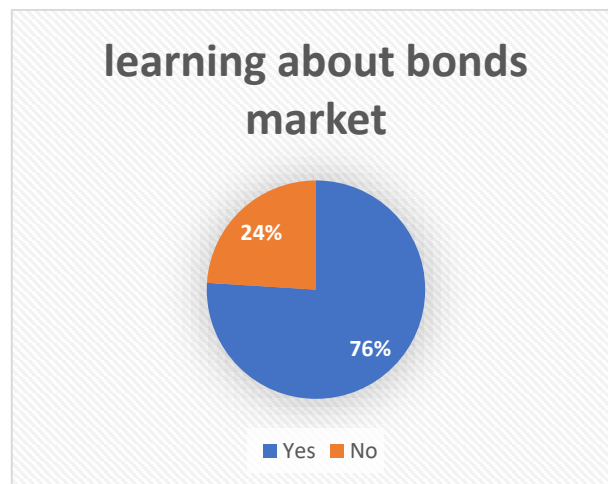
Interpretation:
From the above table and figures it shows that out of 100 respondents majority respondents are 76% of yes and 24% of no respondents

Inference:
From the table and figures it shows Most of the respondents are Yes.

Table no: 18 what would you most like me to discuss relation to bonds?

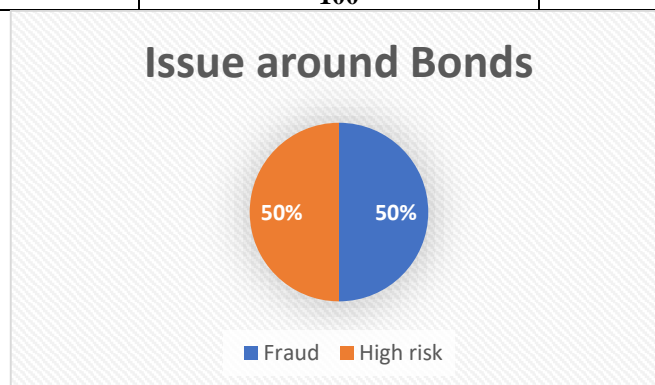| Options	Respondents	Percentage
High profit	43	43
Medium	25	25
Low	32	32
Total	**100**	**100**

Interpretation:
The above table and figures it shows that out of 100 respondents 43% of the respondents are High profit and 32% of respondents are low profit and 25% of respondents are medium respondents

Inference:
From the table & figures we can see that majority respondents are High profit.

Table no 19: what is the biggest dangers issue around bonds as you them?

| Options	Respondents	Percentage (%)
Fraud	50	50
High profit	50	50
Total	**100**	**100**

Interpretation:
From the table and figure it shows issue around Bonds equal respondents of Fraud and High risk
Inference:
It is clear that equal respondents of Fraud and High profit

Table no: 19 what are the biggest advantage of bonds as you see them?

Options	Respondents	percentage
High secure	23	23
Medium	62	62
Low	15	15
Total	**100**	**100**
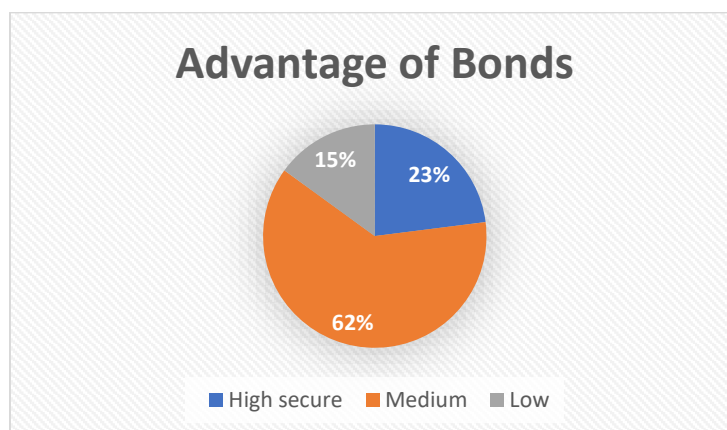
Interpretation:
From the table and figures it shows that Advantage of bonds there are 62% of the respondents are Medium ,23% of respondents are High secure.15% of respondents are Low.
Inference:
From the above table and figures it shows that majority respondents are Medium.

Table no: 20 what is your reason to buy the bonds?

Options	Respondents	Percentage (%)
Principal preservation	16	16
Fixed income	52	52
Varied maturities	19	19
Liquidity	13	13
Total	**100**	**100**
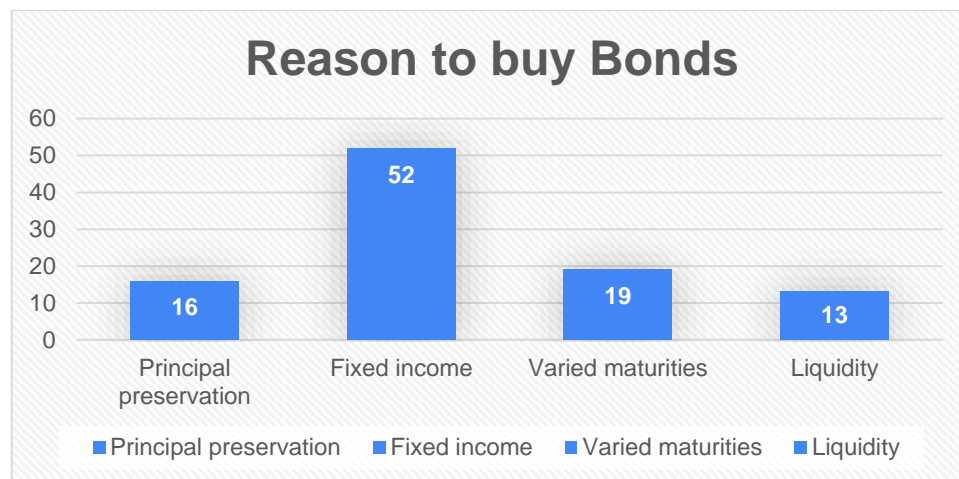
Reason to buy Bonds

Interpretation

From the above table and figures it shows that Reason to buy Bonds out of 100 respondents 52% of respondents are Fixed income ,19% of respondents are Varied maturities, 16% of respondents are Principal preservation,13% of respondents are Liquidity.

Inference:

From the above table & figures it shows that majority respondents are Fixed Income.

REGRESSION

SUMMARY OUTPUT	
Regression Statistics	
Multiple R	0.849311741
R Square	0.721330433
Adjusted R Square	0.581995649
Standard Error	7.829898134
Observations	4

ANOVA					
	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	317.3854	317.3854	5.17696	0.150688259
Residual	2	122.6146	61.3073		
Total	3	440			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	9.19395466	7.9740263	1.152988	0.36811	-25.11551127	43.50342059	-25.11551127	43.503421
In which bond you have invested?	0.632241814	0.2778727	2.275293	0.15069	-0.563347862	1.827831489	-0.563347862	1.8278315

RESIDUAL OUTPUT		
Observation	*Predicted What is the risk associated with Bonds?*	*Residuals*
1	39.54156171	-0.541562
2	23.73551637	7.2644836
3	15.5163728	1.4836272
4	21.20654912	-8.206549

PROBABILITY OUTPUT

Percentile	What is the risk associated with Bonds?
12.5	13
37.5	17
62.5	31
87.5	39
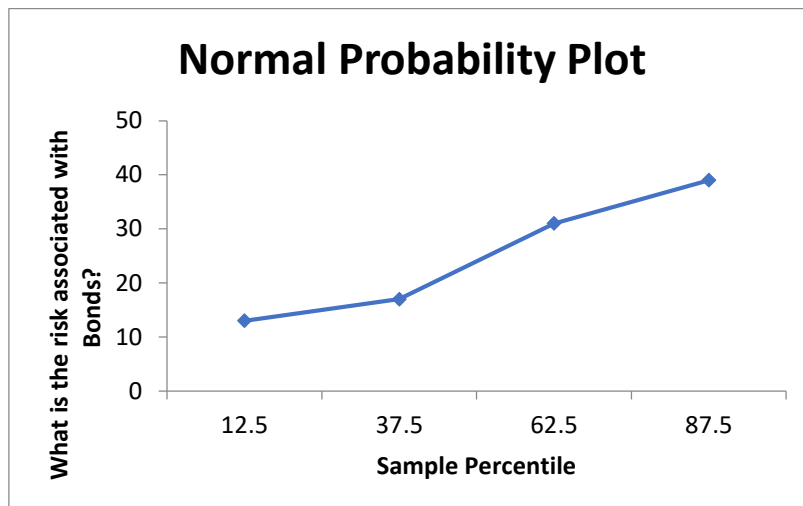
ANOVA: SINGLE FACTOR

SUMMARY					
Groups	Count	Sum	Average	Variance	
How do you come to know about bonds?	5	100	20	53.5	
What Bonds are you mostly invested in?	5	100	20	251.5	
ANOVA					
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	0	1	0	0	1	5.31765507
Within Groups	1220	8	152.5			
Total	1220	9				

CHI SQUARE TEST

Count of Gender	Column Labels							
Row Labels	f) student	a) self-employed	b) Busines	c) salaried	d) profession	e) Retired	f) Student	Grand Total
Female	1	4	1	17	4	1	22	50
Male		3	3	25	4		15	50
Grand Total	1	7	4	42	8	1	37	100

Row Labels	f) student	a) Self-employed	b) Business	c) salaried	d) profession	e) Retired	f) Student	Grand Total

Female	0.5	3.5	2	21	4	0.5	18.5	50
Male	0.5	3.5	2	21	4	0.5	18.5	50
Grand Total	1	7	4	42	8	1	37	100

H0: There is no significant association between Gender and occupation
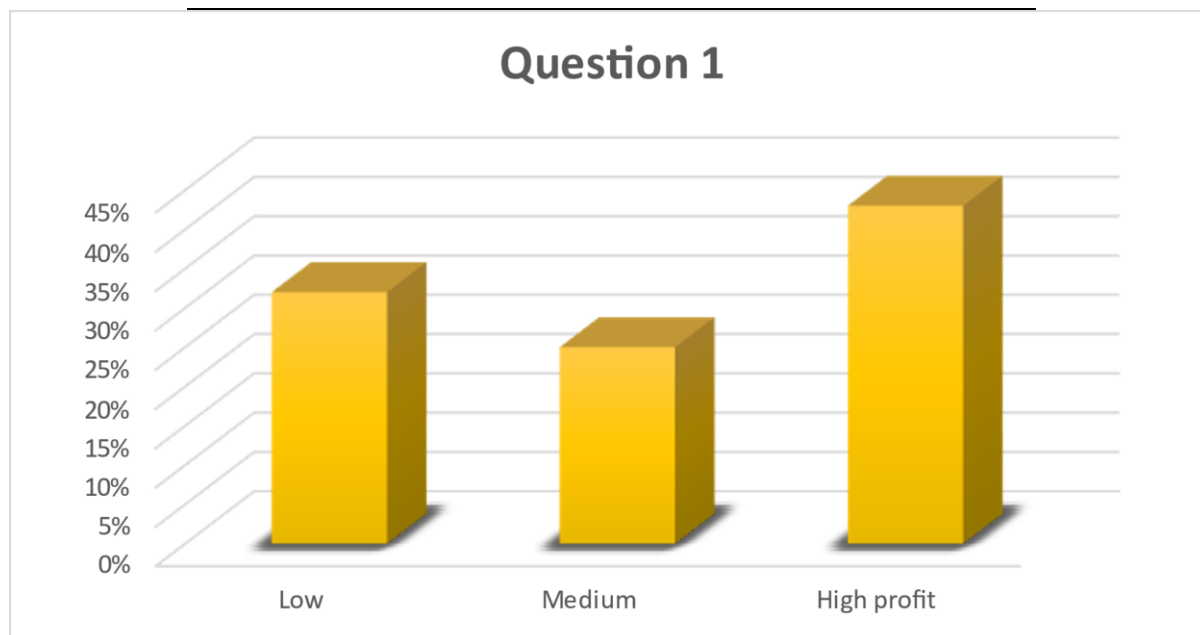If, P value < 0.05   RejectH0
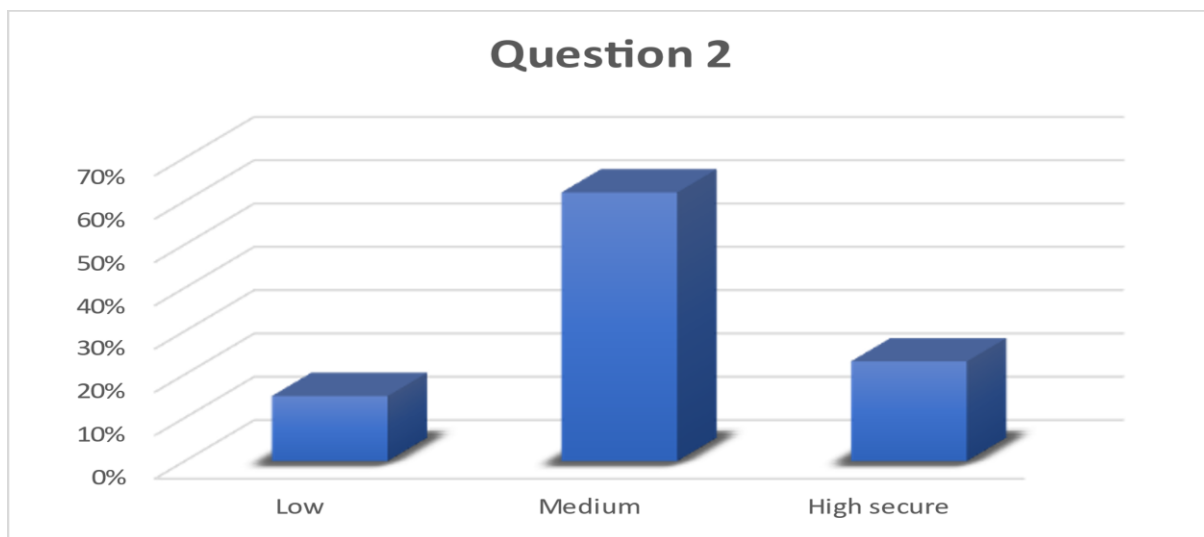   P value>0.05   Accept H0
P value 0.05234262
0.05234262> 0.05

t-Test: Two-Sample Assuming Unequal Variances

	Q 1	Q 2
Mean	2.11	2.08
Variance	0.745353535	0.377373737
Observations	100	100
Hypothesized Mean Difference	0	
Df	179	
t Stat	0.283128846	
P(T<=t) one-tail	0.388702618	
t Critical one-tail	1.973305434	
P(T<=t) two-tail	0.777405236	
t Critical two-tail	2.260413876	

Interpretation:

Finding a significant difference when there was none. Incorrectly rejecting null hypothesis.

There is significant difference Alpha =0.025, (T<t)=0.0016 is not less than 0.025. Therefore, there is no difference in means between Q1

DISCUSSION

According to the survey, it is based on the responses of 100 people. Male and female respondents are in equal numbers. It is clear that the highest percentage of responders are graduates and post-graduates. According to the report, 91 percent of the people who responded are married. Salaried people make up the majority of the responders The majority of respondents have not invested in bonds because they believe they are dangerous, while some have not invested due to financial concerns. It is observed that 30 percentage of people are know the Bonds in Internet. The majority of people are said to be invested in corporate bonds. The majority of respondents would like to invest in corporate bonds, with callable bonds receiving the least amount of interest. The majority of respondents believe that bonds are at risk of inflation. It has been discovered that 38 percent of respondents have Bonds in their portfolio. It has been discovered that 35% of people feel confident in their ability to invest in bonds. The Bonds' equal respondents pose the greatest threat to the Bonds. The majority of respondents are investing in bonds for stable income rather than liquidity The majority of respondents believe bonds provide a medium advantage. Majority of the respondents say there is high profit of Bonds. It is observed that 78 percentage of the people are interested to learning the Bonds It is observed that risk associated of the Bonds there is a 31 percentage of the respondents are interest rate of risk. Out of respondents 76 percentage were investing In Bonds and 24 percentage are not. Establishing a suitable framework for the creation of corporate bonds. Developing tools for credit, market, and liquidity risk. Creating a proper institutional mechanism for credit improvement to allow companies with weaker credit ratings access to the corporate bond market. Developing an even yield curve for the government securities market in order to price corporate bonds efficiently.

CONCLUSION

A corporate bond market offers a viable alternative to traditional bank financing while also reducing the risk of foreign currency funding. Regulators in India have taken aggressive measures and supplied the industry with risk management tools. Efforts are being made to promote broader market participation and expand the scope of market making. Debt accumulation, on the other hand, is not a one-time event. In India, the deep and liquid market is developing at a faster rate. There are also issues that will require sustained coordination and collaboration between market participants and authorities in order to expand the private bond market and make India's bond market more competitive.

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