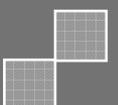


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Index

Sr. No.	Title	Page no.
1.	Risk Tolerance level of Equity Investor in South Gujarat Region -Dr. Vijay Gondaliya and Mr. Govind Dhinaiya	01-10
2.	Profitability and Financial Strengths of Oil and Gas Industry of India -Dr. Jaydip Chaudhari and R. Elango	11-17
3.	Role of Regulatory Bodies in India: An analysis -Dr. Aditya Srinivasan and Dr. Jimmy Kapadia	18-22



Risk Tolerance level of Equity Investor in South Gujarat Region

Dr. Vijay Gondaliya* and Mr. Govind Dhinaiya**

ABSTRACT

The inspiration of this study was to support a prospective of risk tolerance capacity of equity investor and to give practical insights into the buying a particular stock with respect to their risk capacity. Assessing investor risk tolerance is one of the most important activities for financial planners. Identification and understanding of the degree of investment volatility an investor preference is necessary when recommending investment allocation strategies. The purpose of risk management is to identify risks that are important enough for investor to manage their uncertainty.

Using chi-square analysis on investment experiments to obtain some evidences from a sample of 302 respondents in survey; our results indicate that investor's risk tolerance capacity and acceptability are insignificant with relation to age, education and occupation while positively related to the income level. This finding implicates that investor with higher risk tolerance level shows higher income level and vice versa with relation to ability, acceptability and comfortability. Also, find that there is no association between age, education and occupation with risk tolerance ability, acceptability and comfortability.

Introduction

Every individual investor wants to gain more money out of their investment, for this they required to make effective investment strategy. Any investor is exposed to risk given that there is uncertainty about the financial outcome of the investment. To be able to effectively plan your finances and investments, you must be able to understand and quantify risk. This is not as simple as the chances of

getting your money back, as you need to consider many other aspects such as fluctuations in the value of your portfolio, the costs of inflation and interest rates.

Risk tolerance is a measure of how much you are willing to lose when the financial market goes down. Risk is a key element for investing and it has a multidimensional concept. Because investments can have liquidity, credit, inflation, and prepayment risks, among others.

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Every individual investor has assessed their risk capacity before they make their investment in the stock market either through direct or through the mutual fund. To assess the risk tolerance level of investor is prime task of financial adviser. Because, through which it can be identified that whether the investor as an aggressive or conservative in nature in terms of their tolerance capacity.

In analysing the risk tolerance assessments, demographic variables relating to the investor need to be taken into consideration and controlled for. Prior research in various country contexts finds significant relationships between risk tolerance and demographic variables such as gender, age, educational attainment, net assets, income, marital status and number of dependants.

First of all required to determine risk tolerance level for risk, which is help for the investor to focus on the risk that are important. Determining investment suitability depends heavily on the ability to assess risk tolerance. According to Grable (1999); Cordell (2001); and Yang (2004) there are few, if any, generally recognized measures or instruments designed to ascertain investor's financial risk tolerance or preference.

The following things to take into consideration when you are determining your risk tolerance:

1. Earning capacity of the investor.
2. Investor should decide proportion of saving out of his/her earning.
3. Determination of investor's financial goal.
4. Determination of investor's future need.
5. Time horizon for investment.

Above all the points are decided the risk tolerance level capacity, ability and conformability of investor's

Definition

The degree of uncertainty in the value of financial assets by an investor can handle in regard to a negative change in the value of their portfolio. When deciding on the investment in a particular stock you should weigh whether the risk is worth the reward you will gain. In order to make investment choices that fit your financial goals you should first establish your risk tolerance and conform the investment decisions you make to it.

Risk includes the possibility of losing money. However, extra considerations should be made in addition to the safety of the principal and the potential for growth. These considerations include the

likelihood of achieving the financial goals you have established. Additionally, you should consider whether you are willing and able to accept a higher level of risk in order to achieve further rewards.

When investors are ready to invest in the equity market, the first question is: how much risk can you handle? That is because an investor's tolerance for risk is inextricably intertwined with an investor's willingness to invest. Every individual's investor's tendency is to earn a good return and not to loan any single money value. But in the reality "risk and reward go hand in hand."

Literature Review

There have been substantial contributions in the Economic literature to the study of risk tolerance and its relation to individual financial behavior and risk tolerance. The previous literature found that most shareholders tend to perceive risk as the potential to lose principal—a narrow, one-dimensional view and find that either very conservative or very aggressive investor. Moreover, investor think that they understand the relationship between risk and return but, they associate more risk with equity investments than they do with fixed-income investments, but that the level of return the associate with each type of investment is similar. Generally it happen because of people are make

investment for short period of time and also find that lack of awareness about the investment option.

John E. Gilliam, Swarn Chatterjee and Dandan Zhu (2010) found that demographic variable such as education, income, net worth and gender has positive relationship with leading boomers and trailing boomers. But there is negative relationship with marital status. They also suggested that leading boomers were less risk tolerant than trailing boomers.

Lujer Santacruz (2009) identified that risk tolerance is not affected by general economic mood of Australian investor and it is not necessary that risk tolerance score was changes in the investment climate.

Robert Faff, Terrence Hallahan and Michael McKenzi (2009) suggested that role of age, income and number of dependents has positive nonlinear linkage with risk tolerance score.

Robert W. Moreschi, Virginia Military Institute (2005) identified that gender and education was the most significant demographic factor to identify the ability of individual to measure risk taking ability and predict their own risk tolerance score. Another factor was income and net worth to have little influence on the ability to accurate forecast their risk tolerance score.

Risk Tolerance Level

Before starting on the setting of the investment portfolio, every investor should establish his/her risk tolerance level. Only after this s/he is ready to build strategies for the accomplishment of his/her financial goals.

The higher the degree of risk involved in the investment portfolio the greater the chances of higher returns and failures.

The setting of the risk tolerance level is very subjective issue. However, younger investors can afford more risk taking since they have more time to fix the losses. On the other hand older investors should apply more conservative approach since they have less time in front of them. But, they should keep in mind that they greatly decrease their chances of faster achieving their financial goals.

A portfolio that carries more bonds is considered more conservative and risk averse. However, the one that includes a greater percentage of stocks is more risk taking with higher potential of rewards. Many financial experts recommend the diversification between investments with different degrees of risk. This is a good idea since your portfolio will benefit from the rises and falls of the different investments and will alleviate the potential of losing money.

The important thing to remember is that you cannot go without risk if you are to start stock investing. What you should do is to determine your risk tolerance level and try to minimize the risks you can control. To be a successful investor you need two main things - the knowledge and the right trading platform.

Objectives of the study:

- To study the risk tolerance level of equity investors.
- To know the time horizon for investment by equity investor.
- To known the ability, comfortability and acceptability of risk out of their investment.

Methodology

We have hypnotized that an individual investors' risk tolerance ability, comfortability and acceptability is significantly related to the demographic profile such as age, income, educational background and occupation. To test this supposition, we develop a questionnaire for collect relevant data from the equity investors in South Gujarat region. A total of 302 equity investor were contacted and take their response towards their investment time horizon, their behavior regarding buy and sell securities according to market trend and risk taking ability, comfortability and acceptability.

In the first phase we have collected data from through the use of subjective survey questionnaire from respondents to asked, or volunteers, to answer a variety of risk/return questions related to the risk taking ability, comfortabilit and acceptability. In the second phase we have analysis the data and draw the conclusions.

Risk tolerance score is a function of propensity, attitude, capacity, and knowledge. Of these, attitude and capacity are most significant. A variety of socio-economic variables have been proposed and tested. Research to date, however, has not always provided a consensus regarding the effect of these factors on risk tolerance.

Data analysis and interpretations

Table: 1 Demographic variables and Investment time horizon

Demographic Factor	Investment Time horizon				Pearson Chi-Square		
	0- 3 yrs	4-9 yrs	10 yrs & above	Total	χ^2	df	p-value
Age					7.883	10	0.640
> 25 years	23	20	5	48			
25 to 30 years	22	34	13	69			
31 to 35 years	15	15	4	34			
36 to 40 years	16	17	5	38			
41 to 45 years	17	27	6	50			
< 45 years	31	23	9	63			
Education							
SSC	21	12	7	40	6.273	6	0.393
HSC	23	30	5	58			
Graduate	57	69	20	146			
Post Graduate	23	25	10	58			
Income (yrl)							
Less than 150000	51	51	13	115	6.953	8	0.542
151000 to 250000	41	46	17	104			
251000 to 350000	20	21	9	50			
351000 to 500000	11	11	2	24			
More than 501000	1	7	1	9			

Occupation							
Service	46	47	17	110	3.829	6	0.700
Business	37	50	15	102			
Farmer	35	34	7	76			
Others	6	5	3	14			

From the above table, suggested that null hypothesis is accepted in all cases. It means that investment time horizon and demographic factors (Age, Income, Education and Occupation) is separated from each other.

Here, it is said that whether investor invests their money for short period or long period there is no difference in taking risk at any level of income, age, occupation and education.

Table: 2 Demographic variables and Risk Tolerance Level (Score)

Demographic Factor	Risk Tolerance Level (Score)							Pearson Chi-Square
	0-15	16-20	21-25	26-30	31-35	36 & Above	Total	
Age								
> 25 yrs	3	5	12	24	4	0	48	$\chi^2 = 30.283$
25 to 30 yrs	2	11	27	20	8	1	69	
31 to 35 yrs	3	5	10	8	8	0	34	df = 25
36 to 40 yrs	2	6	15	12	1	2	38	
41 to 45 yrs	5	4	14	18	7	2	50	p value = 0.214
< 45 yrs	2	5	22	25	5	4	63	
Education								
SSC	5	2	13	15	5	0	40	$\chi^2 = 20.713$
HSC	4	8	20	20	3	3	58	df = 15
Graduate	6	19	48	52	20	1	146	p value = 0.146
Post Graduate	2	7	19	20	5	5	58	

Income (Rs.) (yrl)								
> 150000	6	14	33	45	14	3	115	$\chi^2 = 26.673$
151000 to 250000	9	9	41	34	9	2	104	df = 20
251000 to 350000	0	8	22	14	4	2	50	p value = 0.145
351000 to 500000	2	5	2	9	4	2	24	
< 501000	0	0	2	5	2	0	9	
Occupation								
Service	4	16	40	33	15	2	110	$\chi^2 = 19.089$
Business	9	11	26	41	10	5	102	df = 15
Farmer	2	8	31	25	8	2	76	p value = 0.210
Others	2	1	3	8	0	0	14	

From the above table, suggested that null hypothesis is accepted in all cases. It means that risk tolerance level and demographic factors (Age, Income, Education and Occupation) is separated from each other.

Here, it is said that investor invests their money in low volatile securities and taking the advantages of lower fluctuations in security return at any level of income, age, occupation and education. Majority of the investor are always play safer role towards the return on investment.

Table: 3 Demographic variables and Risk taking Ability, Acceptability and Comfortability

Demographic Factor	Risk taking Ability, Acceptability and Comfortability (Score)					Pearson Chi-Square		
	0-8	9-15	16-20	<= 21	Total	χ^2	df	p-value
> 25 yrs	14	29	4	1	48	16.706	15	0.337
25 to 30 yrs	27	28	8	6	69			
31 to 35 yrs	10	16	6	2	34			
36 to 40 yrs	14	21	2	1	38			
41 to 45 yrs	18	27	5	0	50			
< 45 yrs	27	27	8	1	63			

Education								
SSC	22	16	1	1	40	12.798	9	0.172
HSC	18	29	7	4	58			
Graduate	50	77	16	3	146			
Post Graduate	20	26	9	3	58			
Income (Rs.) (yrl)								
> 150000	38	67	10	0	115	20.371	12	0.050
151000 to 250000	40	46	12	6	104			
251000 to 350000	20	21	4	5	50			
351000 to 500000	9	10	5	0	24			
< 501000	3	4	2	0	9			
Occupation								
Service	42	52	13	3	110	5.006	9	0.834
Business	36	49	13	4	102			
Farmer	29	38	5	4	76			
Others	3	9	2	0	14			

From the above table suggested that null hypothesis is accepted in the case of age, education and occupation while in case of income null hypothesis is rejected.

It indicates that investor having lower the level of income they are not able to take high risk as well as not accept the higher risk. It is also said that the investor having lower income they are always play safer role towards the investment in the security.

Conclusion

This paper has significant implication in assessing investor risk taking ability and acceptability. An assessment of equity investors risk tolerance through a questionnaire is one of the most important

activities for financial planner's recommendation on portfolio allocation. Identification and understanding of the degree of investment volatility an investor prefers is necessary when recommending investment allocation strategies. In the

south Gujarat region equity investor are very conservative risk takers. Study of risk perception and its impact on investment behavior is one of the core investigation issues of behavioral finance research.

One of the interesting things was observed and analyzed that there is no association between risk tolerance level and age, education and occupation.

Only income is affecting the risk taking ability and capability of an investor. Investor whose income is low they prefer to take lower risk and make investment in fixed income security or lower volatile security and vice versa.

Financial planner and adviser should emphasis on investor education program, which is lead to improve the awareness level and risk taking ability of the investors for the long run investment in equity.

Therefore, understanding the financial risk tolerance exhibited by this cohort can be useful for private wealth managers and financial planning practitioners in designing the investment portfolios for this generation.

References:

1. Cordell. (2001). Risk PACK: How to evaluate risk tolerance. *Journal of Financial Planning*. June. 36 – 40.

2. Grable. & Lytton. (1999). Financial Risk Tolerance Revisited: the Development of a Risk Assessment Instrument. *Financial Services Review*. 8(3). 163 – 181
3. Jasim Y. Al-Ajmi (2008). Risk Tolerance of Individual Investors in an Emerging Market. *International Research Journal of Finance and Economics*, ISSN 1450-2887 Issue 17, pp. 15-26 (<http://www.eurojournals.com/finance.htm>).
4. John E. Gilliam, Swarn Chatterjee and Dandan Zhu (2010). Determinants Of Risk Tolerance In The Baby Boomer Cohort. *Journal of Business & Economics Research*, Volume 8, Number 5, pp- 79-88.
5. Joseph. I. Injodey and Dhanya Alex (2011). Risk Tolerance of Investors: Developing a Psychometric Tool. *Research Journal of Finance and Accounting*, ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol 2, No 2, 2011. (www.iiste.org).
6. K. Prabhakaran and P. Karthika. A Study on Risk Perception and Portfolio Management of Equity Investors in Coimbatore City. <http://jms.nonolympictimes.org/Ar>

- [ticles/1.pdf](#) accessed on 28/12/2012
7. Lujer Santacruz (2009). Effect of general economic mood on investor risk tolerance – implications for financial planning”. *JASSA The Finsia Journal of Applied Finance issue 1*, pp 35-42.
 8. Robert Faff, Terrence Hallahan and Michael McKenzi (2009). Nonlinear linkages between financial risk tolerance and demographic characteristics. *Applied Economics Letters, Issue 16*, pp 1329–1332.
 9. Robert W. Moreschi, Virginia Military Institute (2005). An Analysis of the Ability of Individuals to Predict their Own Risk Tolerance. *Journal of Business & Economics Research, Volume 3, Number 2*, pp- 39-48.
 10. <http://www.investopedia.com/terms/r/risktolerance.asp#ixzz1YrTxjC4> accessed on 25/12/2012
 11. <http://articles.moneycentral.msn.com/Investing/SimpleStrategies/HowToAssessRiskTolerance.aspx> accessed on 15/12/2012
 12. <http://www.stock-market-investors.com/stock-investment-risk/investment-risk-tolerance-level.html> accessed on 15/12/2012
 13. <http://www.ici.org/pdf/fm-01-94.pdf> accessed on 22/12/2012