

RISK TOLERANCE PROFILE OF INVESTORS IN THE GULF STATES

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Abstract

The paper focuses on the individual characteristics and the psychological aspects of investors that outlines their financial and investment pattern which is discussed in a subject of growing emphasis called Behavioral Finance. Risk tolerance is the amount of predictability or uncertainty in an investment that an investor is ready to accept or resist while looking to reap returns in the future. One must have a thorough knowledge of his own ability and willingness to overcome large variations in the value of his investments. Tolerance is a deciding factor that determines the utility of any investment decision. Utility maximization is regarded as the primary concern of any financial decision. Through this research the author analyses the Risk Tolerance of individual investors in the Gulf States and thereby suggests a suitable investment portfolio to them. A risk tolerance data set measurement tool is adopted here for collecting, measuring and analyzing risk profile data. The findings drawn on the demographic factors considered for the study are worthwhile and the correlation analysis revealed that risk tolerance and demographic parameters are closely related each other.

Keywords: Risk Tolerance, Behavioral finance, Risk-Return, Individual Investors

INTRODUCTION

An investor's degree of uncertainty in terms of the adverse changes on its financial assets is described by a specific term called risk tolerance. Risk tolerance in specific is regarded by the management as an objective that aligns risk appetite with its risk tolerance with its tolerance. Tolerance is a deciding factor that determines the utility of any investment decision. Utility maximization is regarded as the ultimate goal of a financial activity. Higher the risk more will be

the chance of getting panic and making untimely sales. An investor who is risk-averse will be having investments with values more than relatively stable, which will neither increase nor decrease much in the value. On the other side a risk tolerant investor will enjoy an increased value of his investments at good times and a sudden fall dramatically in adversities. The risk tolerance of an individual differs by various factors such as personality, stages of life etc. For instance, a retired person will be less risk tolerant and reluctant to make high risk investments whereas a young professional will be more risk tolerant at investments.

Two factors which we always have to consider in investor risk tolerance are actual return and expected return. In fact risk has got the chance of losing at times, almost all of the initial investments. It gives the emphasis on the relationship between risk and return. From an investors point of view, more the amount of risk he or she is willing to take, more will be the potential returns. An investor must be ready to compensate for taking excessive risk. Literally risk tolerance include so many factors to be considered such as time horizon available for investors, future earning capacity of investor, social security of investors, and other asset classes of investors including home and pension. Generally an investor can take higher levels of risk with assets, when there are more stable sources of funds within his credit.

Aggressive Risk Tolerance

This class of investors always tend to be markets-savvy. A great in depth knowledge and understanding of the assets and their propensities tempt such investors to purchase highly volatile securities and instruments such as stocks, options and other similar asset classes. Aggressive investors always maintain a high level of risk - return ratio.

Moderate Risk Tolerance

Moderate investors always keep a balanced strategy with intermediate level time horizons. They combine a variety of mutual funds with less volatile securities and bonds, thereby pursuing a 50:50 ratio.

Conservative Risk Tolerance

Here the type of investors naturally tend to accept little to no volatility on their portfolio of investments. Usually retired individuals who have earned through decades are unwilling to take any sort of risk on their investments. They tend to have other guaranteed and highly liquid assets.

Financial Risk Tolerance

Financial risk tolerance can be explained as the amount of volatility an investor is ready to take while making financial decisions. It's a complex phenomenon which includes four major aspects such as financial, physical, ethical and social backgrounds. While choosing a saving and investment avenue households also consider risk tolerance as an important factor which is connected to the future goals and choices like asset allocation, portfolio accumulation, and many more. Individual risk tolerance is directly linked with risk management and insurance. Investor's risk is associated with so many individual characteristics like gender, marital status, age, occupation, time horizon, income, portfolio size and their attitude to price fluctuation. Here an attempt is made to analyze the relationship between demographic variables and other risk tolerance factors of investors and thereby to predict a person's risk tolerance based on it.

REVIEW OF LITERATURE

Majority of the risk tolerance studies are based on various factors like, socioeconomic, demographic and attitude. These studies are based on various determinants as follows:

Charles (2012), Rahmavati (2015) Age, gender, marital status, employment status and economic downturns are the major factors that have an effect on the risk tolerance of an individual. Lazzarone, (1996) opined that marital status is a factor that affects the risk and return of an individual and the satisfaction from his investments. MacCrimmon and Wehrung (1986)-studied the association between socioeconomic, demographic and other factors related to financial risk tolerance. Slovic (1966) his findings state that men could and always take high risk than women. It generalizes the fact that women are likely to be less tolerant than men. Wallach and Kogan (1961) found that age and risk tolerance are closely related to. Older individuals are always tend to be less risk tolerant than youth. Roszkowski et al. (1993) stated, the occupational level/ status is also having a relationship with financial risk tolerance. Baker & Haslem, (1974); Grable & Lytton, (1998); Shaw, (1996) opined that an individual's level of future education can also affect the risk tolerance to a great extent. Grable, Lytton (1997), Grable, Joo (1997), Sung, Hanna (1996), Chen(2006), Chris Veld(2006) and Jasim (2008), Rui Yao(2011) found that an individual's knowledge on personal finance and his expectations can also influence his/her own risk perceptions/preferences.

In short it can be stated that women are less risk tolerant than men, Older individuals are tend to have less risk tolerant than younger individuals, married couples/ individuals are less risk tolerant than single investors, professionals are highly risk tolerant than nonprofessionals, nonwhites are less risk tolerant than whites, low level income groups are less risk tolerant than high level income groups and that highly educated individuals are more risk tolerant.

RESEARCH OBJECTIVES & HYPOTHESES

The study sets following objectives-

1. To assess the financial risk tolerance level of individual investors in the Gulf states.
2. To identify an appropriate portfolio of investment with an accepted level of risk.
3. To analyze the demographic factors of investors and his/her risk tolerance level.

And, intends to test following hypotheses-

1. Risk tolerance and investor gender are always independent attributes.
2. There is no significant relationship between the risk tolerance and the number of dependents of an investor.
3. Risk tolerance level decreases as the age increases.

METHODOLOGY

A risk tolerance data set measurement tool is adopted in this research for collecting, measuring and analyzing risk profile data from a sample of 200 individual investors in the Gulf States, collected during the month of April 2018. Stratified random sampling was followed based on the demographic profile of the respondents residing in major cities of the GCC nations in the Gulf. A subjective assessment questionnaire is used to measure the individual's level of risk is undertaking. Psychological questions are included in the questionnaire to be measured based on the variables like birth, income, education, gender, marital status etc.

ANALYSIS AND DISCUSSION OF RESULTS

Demography of investors

A detailed interpretation of the demographic profile of the sample investors presented in the Table 1.

Table 1: Demographic Profile of Investors

Parameter	No. of Investors	Percentage
Gender		
Male	80	40
Female	120	60
Total	200	100
Age (in Years)		
25 – 35	148	75
35 – 45	52	25
Above 45	0	0

Total	200	100
Marital Status		
Unmarried	68	35
Married	132	65
Total	200	100
Annual Earnings (in US Dollars)		
Up to 40000	180	90
40000 – 70000	20	10
Above 70000	0	0
Total	200	100
Financially responsibility		
Only you	8	5
1 individual in addition	32	15
2 to 3 individuals in addition	140	70
4 to 5 individuals in addition	20	10
Total	200	100
Level of Education		
Post Graduate and above	72	36
Graduate	80	40
Under Graduate	48	24
Total	200	100

Table 1...

Out of the 200 samples surveyed 60% were females constituting a total no: of 120. Majority of the respondents were of the age group 35-45. Around 65% of the total sample investors were married, and 90% were having annual earnings of below 40000 dollars.

Classification of Risk Group

The risk profile of the investors is presented in Table 2.

Table 2: Risk Profile of the Investors

R G	S R	No. of investors	Percentage
RG1	0-24	20	10
RG2	25-34	20	10
RG3	35-44	32	16
RG4	45-54	36	18
RG5	55-64	56	28
RG6	65-74	20	10
RG7	75-100	16	8
Total	0-100	200	100

The Risk Groups have been classified in to 7 and the Risk Score ranges from 0 to 100. Out of the 200 sample investors surveyed majority of them (28 %) belongs to Risk Group 5 in which the Risk Score ranges from 55-64. Around 36 (18%) of the investor samples fall in the Risk Group 4 where the Risk Score ranges from 45-54. The least number of investors fall in the Risk Group 7 which constituted around 16 samples (8%). (RG- Risk Group, SR- Score Range).

Preferred Portfolio of Investment

The Preferred Port Folio of investments on the basis of Risk Return ratio is given in the Table 3.

Table 3: Preferred Portfolio of Investment on the basis of Risk-Return ratio

Portfolio	Risk-Return ratio		
	Low	Medium	High
1	100%	0%	0%
2	70%	30%	0%
3	50%	40%	10%
4	30%	40%	30%
5	10%	40%	50%
6	0%	30%	70%
7	0%	0%	100%

In the questionnaire there are seven portfolios, which represents a mix of investments classified as high, medium, low risk/return.

Return Expectations and sensitivity to volatility under different risk groups

From a set of bank and cash deposits, the rate of return of a multiple ten year expectations are included in the questionnaire. It covers questions in relation with sensitivity to volatility in terms of level on which the value of all investments would fall before the individual would tend to feel uncomfortable. The answers of the risk groups are included in the Table 4.

Table 4: Return Expectations and Sensitivity to Volatility under Different Risk Groups

Risk Group	Preferred Portfolio	Return Expectations	Sensitivity to Volatility
RG1	1 or 2	1 – 1.5x BDs	Any fall
RG2	2	1 – 1.5x BDs	Any fall
RG3	3	1.5 – 2x BDs	10% fall
RG4	4	1.5 – 2x BDs	20% fall
RG5	5	2 - 2.5x BDs	20% fall
RG6	6	At least 3 x BDs	33% fall
RG7	7	More than 3 x BDs	50% fall

The risk groups ranging from RG1 to RG7 with their preferred portfolio is given in the table. Here RG5, RG6 and RG7 have got highly optimistic return expectations. The progression of the risk tolerance, the preferred portfolio, its weighted risk/return expectations and the sensitivity to volatility is also shown in the table.

Suggested Portfolio of Investments and Assets Allocations:-

Suggested Port Folio of Investments and Asset Allocations are described in the Table 5.

Table 5: Suggested Portfolio of Investments and Assets Allocations

Portfolio	Defensive (% of Investment)	Growth (% of Investment)	Defensive Financial Assets		Growth Financial Assets (International Stocks)
			Cash	Fixed Interest	
1	100%	0%	20%	80%	0%
2	85%	15%	15%	70%	5%
3	70%	30%	10%	60%	10%
4	50%	50%	10%	40%	20%
5	30%	70%	5%	25%	30%
6	15%	85%	0%	15%	35%
7	0%	100%	0%	0%	40%

Testing of Hypothesis

For the purpose of testing of hypothesis, the Risk Tolerance level Score of sample investors have been classified in to 3 groups viz. High Risk Group Score (55-100), Medium Risk Group Score (35-54) and Low Risk Group score (0-34), have been categorized on the basis of the questionnaire. The Table 6 shows the classification of sample investors on the basis of the Risk Tolerance level.

Table 6: Classification of Investors on the basis of Risk Tolerance Level

Sl. No	Risk Tolerance	R S Range	No. of Investors	%
1	High Risk Group (RG 5,6 & 7)	55-100	92	46
2	Medium Risk Group (RG 3&4)	35-54	68	34
3	Low Risk Group (RG 1 & 2)	0-34	40	20
	Total	0-100	200	100

Hypothesis 1: Risk tolerance level and the gender of investors are two independent attributes.

Table 7: Gender & Risk Tolerance Level

Risk Group	Male	Female	Total
High	72 (78.26%)	20 (21.74%)	92
Medium	20 (29.41%)	48 (70.59%)	68
Low	20 (50%)	20 (50%)	40

(Figures in parenthesis shows % of their respective total)

Interpretation: The results of the Chi square test reveals that risk tolerance and gender are two independent attributes of an investor. There exists 5% level of significance with a value of 5.939, < 5.99 . Here, Chi square value=5.939, Degrees of freedom =2 at 5% significance level.

Hypothesis 2: Risk Tolerance level decreases when age increases.

Interpretation: Karl Pearson Correlation coefficient showed $r=0.2614$ which concluded that there is no significant relationship between risk tolerance level and age.

Hypothesis 3: There is no significant relationship between Risk Tolerance level and number of dependents.

Interpretation: Karl Pearson Correlation coefficient revealed $r = - 0.20998$, which concluded that there is no significant relationship between risk tolerance level and the number of dependents.

CONCLUSION

The study supports the earlier findings and its relationships among the variables such as age, gender and risk tolerance level of individual investors. The determinants of financial risk tolerance including socioeconomic, demographic and attitudinal factors received partial support in the analysis. For investment managers, this study has got implication on investments in various avenues, since it came out of certain astonishing and interesting aspects of an individual investor, who still prefers investing in financial products that enjoy risk free returns. The demographic factors considered for the study are much significant and the correlation analysis revealed that risk tolerance and demographic parameters are closely related each other.

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