

A RELATIONSHIP BETWEEN INVESTOR'S DEMOGRAPHICS AND THEIR BEHAVIOR TOWARDS SHARE MARKET INVESTMENTS

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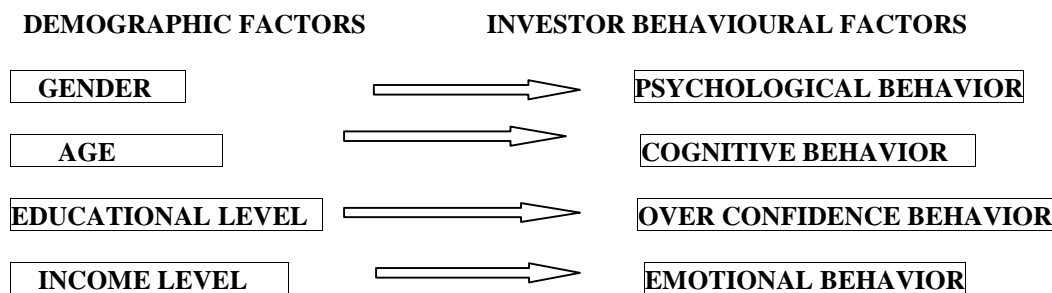
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INTRODUCTION

In the contemporary scenario, the behavioral finance is becoming an integral part of the share market investments because, it greatly influences on investor demographic factors that include (i) Gender, (ii) Age, (iii) Educational Level, (iv) Income Level, (v) Marital Status, (vi) Occupation, (vii) Religion, (viii) Birth rate, (ix) Size of the family (**Rajarajan, 2002**). Behavioral finance is the study refers to psychology based theory, which helps the investor to clearly identify a better investment portfolio option which is available in the share markets (**Kiran and Rao (2004)**). Without the study of general human behavioral finance, it is very difficult to find out the various investor behavior in the share market. Good selection of investment option of an investment will play a lead role in the share market. In further the study is going to connect with some important demographic factors in particular like Gender, Age, Educational Level, and Income level in relation to investor behavior towards in the share markets.

The Relationship between Investor's demographics and their behavior pattern



According to the first stage, Psychological behavior insists that, concerned with a person's mind and thoughts. Due to high risk tolerance and lack of investment awareness in the share market, the investor psychologically will not prefer to invest the money in the share market. The fact that women are less risky when comparing than men **Sen Shankar Sorn and Gosh Santanu Kumar (2006)**. So this has a great relationship with reference to **GENDER and PSYCHOLOGICAL BEHAVIOUR**.

In the Second stage, Cognitive behavior influence that, mental process involved in knowing learning and understand things. Generally, age factor mainly relies on the maturity level of Individual Investors. Here, the understanding level of individual investor will play a significant role towards finance markets, and an investor need to be well knowledge and equipped himself has a potential investor towards commodity mark **Sharon Collard (2009)**. So this shows a greater influence towards **AGE and COGNITIVE BEHAVIOR**.

In the Third stage, Over Confidence Behavior indicate that, an individual investor was not ready for a situation or he may be not in a better position to handle the situation. Education implies that, "theoretical learning on a particular issue". But an investor has required both theoretical and practical learning by way of experience in connection with the investment market to attain maximum returns without any risk factors (**Al-Tamini and Kalli (2009)**). In order to avoid risk, the investors try to avoid over confidence bias, towards an investment purpose, and moreover situation handling in the investment market is very important because an investor needs to be ready in a better position to handle the situation in the investment markets. So this statement highlighted a better relationship between **EDUCATIONAL LEVEL AND OVER CONFIDENCE BEHAVIOR**.

In the Fourth Stage, Emotional Behavior insists that, part of a person's character or feeling that consists of their thoughts. Emotional includes, Feelings, Fear, Angry, Sadness, stress, etc. Usually emotions have a vibrant influence on decision making by an individual investor (**NSDA Investor Education (2006)**),. Generally an investment relay on Income level of an



individual investor. When an income level fluctuated, the investor will affect emotionally in order to receive better returns from the invested markets. So this causes a relationship between **INCOME LEVEL AND EMOTIONAL BEHAVIOR**.

RIVEW OF LITERATURE

The researcher is interested to review the previous research works on A Relationship between Investor's Demographics and their behavior towards Share Market Investments, both national and international reviews are in their Chronological Order.

Rajarajan, (2002), in his study it was found that the relationship between demographic factors of the investors, and their risk capacity.

Elder and Rudolph (2003), Focus on the sources of bargaining power. He finds that decisions are more likely to be made by the household member with more financial knowledge, more education, and a higher wage, irrespective of gender. They do not explore how the distribution of bargaining power affects financial outcomes. Empirical estimates show that a majority of spouses does indeed differ in risk preferences.

Kiran, D & Rao, U.S (2004), he identified that investors were segmented under four major activities, based on their demographic and psychological characteristics. Risk tolerates of an individual mainly dependent on demographic and psychological variables.

NSDA Investor Education (2006), This study explains about the key factors that influence investment behavior, i.e. demographic factors, the choice of an investment, source of an investment, investment decision making process. These are the key factors which influence investment behavior.

Sen Shankar Sorn and Gosh Santanu Kumar (2006), here the study deals with the relationship between stock market liquidity and sudden changes in risk factors. It has been identified that, there is a negative relationship between risk and stock market liquidity. The final statement revealed that with regard to turnover, there is no relationship between the liquidity and trading activity.

Christiansen et al. (2006) Found that investors with a higher education, invest a larger fraction of asset in stocks and bonds. These findings lend further support to the proposition made in several studies, which state that the level of education is also of importance for whether or not an investor participates in the bond and stock market. Most well-educated individuals are more likely to be financial investors.

Lei Feng and Mark S. Seasholes (2007) Find no significant relationship between investor's age and the percentage of equities in investors' portfolios. Financial planners have begun to acknowledge this type of finding in practice

Ajmi Jy.A. (2008) This study refers to, men are less risk averse than women, less educated investors are less likely to take risks and demographic factor is also important in risk tolerance and also investors are more risk tolerance than the less wealthy investors.

Sharon Collard (2009), The study deals with individual investment behavior. The research is carried out to indicate the Personal Accounts Delivery Authority should be making decisions for its members with regard to pension fund choices. In further, the review highlights that lack of knowledge updating of understanding the various investment schemes. The approach towards investment is minimize losses and maximize the return in relation to long term investments.

Al-Tamini and Kalli (2009) UAE, It refers to analyzing the relationship between financial literacy and factors influencing the investment decisions. Financial literacy was affected by Income level, Educational level and working Environment activity.

Kaleem, Wajid and Hussain (2009), In a study of factors affecting financial advisors perception in portfolio management in Pakistan, found that age, income, language and orientation of education have a significant role in determining the investment style of an investor.

Kabra.et.al (2010), The study undertaken that, the factors influence towards risk tolerance and decision making process on the basis of age and gender of the investors.

Shanmnga Sundaram V (2011), Here the study explains that, perception and behavior are influenced by psychological and behavioral factors in the stock market. This intends to sudden change in stock market fluctuations, which decline the stock indices and lack of confidence towards investments. Risk denotes a major cause on this context.

K. Prabhakaran and P. Karthika (2011), The research deals with risk perception and portfolio management of equity investors. The paper commented on risk tolerance and risk perception on their investment decision. The researcher measured, by using demographic factors in order to find the key elements, which influence the individual investor's investments. In further, the study is analyzed that the investor are not aware of the portfolio, which would minimize the risk and maximize the return. Hence, proper guidance has to take by the investor to invest in the equity markets.

Suman and Dr. D.P.Warne (2012), The research connected with the investment behavior of individual investors in stock markets. The study attempts to identify the behavior of an individual investor in the stock markets, specifically perception and their attitude with respect to the stock market. The research examines that factors, influencing the individual investors are based on Income and Savings. This helps the investors to take a decision to invest in the stock market. In the contemporary world investors are fully aware about the share market fluctuations based on the investment pattern in the stock markets.

ANALYSIS AND INTERPRETATION

Table: 1

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.740
Bartlett's Test of Sphericity	Approx. Chi-Square	3250.363
	df	190
	Sig.	.000

From the above table it is found that KMO measures of sampling adequacy are .740, Bartlett's Test of Sphericity with approx Chi-square value is 3250.363 are statistically significant at the 5% level. This implies the 20 variable are good enough for data reduction.

Table: 2. Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.956	24.778	24.778	2.851	14.254	14.254
2	2.214	11.071	35.849	2.283	11.417	25.671
3	1.596	7.980	43.829	2.127	10.636	36.307
4	1.415	7.073	50.902	1.910	9.550	45.857
5	1.157	5.784	56.686	1.674	8.368	54.224
6	1.055	5.274	61.960	1.314	6.571	60.795
7	1.021	5.104	67.064	1.254	6.269	67.064
8	.949	4.744	71.808			
9	.809	4.046	75.854			
10	.705	3.524	79.378			
11	.629	3.145	82.523			
12	.572	2.859	85.383			
13	.494	2.470	87.852			
14	.479	2.397	90.250			
15	.431	2.156	92.406			
16	.405	2.023	94.429			
17	.342	1.710	96.138			
18	.316	1.581	97.719			
19	.272	1.362	99.082			
20	.184	.918	100.000			

Extraction Method: Principal Component Analysis.

From the above table it is concluded that 20 variables are reduced into 7 predominant factors with cumulative variance 67.064. These 7 factors are named according to their variable loadings.

To further the study is connected with some 7 predominant Investor Behavior pattern like,

- a) Investor preference, b) Risk capabilities, c) Investor dynamics, d) Return expectation
- e) Investment decision, f) Profitability, g) Investor awareness.

These are the important behavioral aspects which are considered to be invested pattern of the investors.

The first factor is called investor Preference (14.254%). The second factor is known as risk capabilities (11.417%). The third factor is called Investor dynamics (10.636%). The fourth factor is known return expectation (9.550%). The fifth factor is an investment decision (8.368%). The sixth factor can be identified as profitability (6.571%) and the final factor is known as Investment awareness (6.269%). These factors are considered to be invested pattern of the investors.

After deriving these factors, it is broadly categorized under the conceptual factors. Initially the physiological behavior consists of investment awareness and Investor preference, secondly, the cognitive behavior is related to the investment decision and investor dynamics, in the next stage, overconfidence is represented by risk capabilities whereas emotional behavior is related to profitability and return expectation.

The relationship with the demographic variables and 7 behavioral factors is identified through one way analysis of variance. The one way analysis of variance clearly revealed that the demographic variables like, Gender, Age, Education, and Income have their respective influence over the 7 behavioral factors.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Q22 D	Between Groups	1.678	4	.420	1.704	.008
	Within Groups	121.864	495	.246		
	Total	123.542	499			
Q23B	Between Groups	7.009	4	1.752	2.251	.003
	Within Groups	385.413	495	.779		
	Total	392.422	499			
Q23C	Between Groups	5.318	4	1.329	1.676	.004
	Within Groups	392.624	495	.793		
	Total	397.942	499			
Q23E	Between Groups	25.281	4	6.320	4.562	.001
	Within Groups	685.847	495	1.386		
	Total	711.128	499			

From the above table it is found that, Return expectation is influenced by age ($F= 1.704, P = .008$), risk capabilities are highly influenced by gender ($F = 2.251, P = .003$), Investor Dynamic is influenced by educational qualification of investors, ($F=1.67, P=.004$) and Investment decision is influenced by occupational of the investors ($F= 4.562, P=.001$).

This shows that, there is a deep relation between demographic variables of the investors and their behavior towards share market investments.

The investment pattern factors are considered as independent variables and the level of satisfaction of investors is considered as the dependent variable. The relationship variable between independent and dependent variable is established through a linear multiple regression analysis. The results are present below;

TABLE 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.660(a)	.435	.427	.36930

a Predictors: (Constant), Q23F (Profitability), Q22D (Return Expectation), Q23B (Risk Capabilities) , Q23D (Investor Awareness), Q23C (Investor Dynamics), Q23E (Investment Decision), Q23A (Investor Preference).

From the above table it is found that $r = .660$ (a), $R \text{ Square} = .435$, and $\text{Adjusted R Square} = .427$ it implies that the investment pattern creates 43.5% variance over the investment satisfaction. This leads to a verification the regression fit as shown in the annova table.

Table 2,ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	51.668	7	7.381	54.120	.000(a)
	Residual	67.101	492	.136		
	Total	118.768	499			

Predictors: (Constant), Q23F (Profitability), Q22D (Return Expectation), Q23B (Risk Capabilities) , Q23D (Investor Awareness), Q23C (Investor Dynamics), Q23E (Investment Decision), Q23A (Investor Preference).

b Dependent Variable: TIS

From the above table it is found that $f = 54.120$, $P = .000$ are statistically significant at the 5% level. This implies that the investment is deeply related to the investment satisfaction of the investors.

The individual influence is measured in the following in the co-efficient table. The results are present below.

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.866	.154		12.107	.000
	Q22D	.016	.033	.016	.475	.635
	Q23A	.187	.028	.353	6.565	.000
	Q23B	-.005	.019	-.009	-.261	.794
	Q23C	.044	.019	.081	2.355	.019
	Q23D	.030	.018	.057	1.663	.097
	Q23E	.171	.014	.420	12.018	.000
	Q23F	.047	.028	.090	1.686	.092

Dependent Variable: TIS

From the above table it is found that investor preference ($\text{Beta} = .353$, $t = 6.565$, $P = .0001$), Investor dynamics ($\text{Beta} = .081$, $t = 2.355$, $P = .019$), Investment Decision ($\text{Beta} = .420$, $t = 12.018$, $P = .000$), are statistically significant at the 5% level. Therefore, it can be concluded that, investment satisfaction are depends upon their dynamical nature, preference and their deep interest in the investment portfolio.



FINDINGS AND CONCLUSIONS

This empirical revealed that, the investor behavior towards share market investment depends upon 7 predominant factors like, a) Investor preference, b) Risk capabilities, c) Investor dynamics, d) Return expectation, e) Investment decision, f) Profitability, and g) Investor awareness. A behavioral factor largely comes under the category of, i) physiological behavior, ii) Cognitive behavior, iii) Over confidence behavior, and iv) Emotional behavior.

The investment satisfaction can be decided by the existing behavior of the investors as well as their risk taking capabilities. The demographic variable like, A) Gender, B) Age, C) Educational Level, D) Income is very important to identify the behavior and the satisfaction level of the investors.

REFERENCE

1. Ajmi Jy. A. (2008). "Risk Tolerance of Individual Investors in Emerging Markets",
2. International Research Journal of Finance and Economics, Issue 17, pp 15-26
3. Al-Tamini and Kalli (2009). UAE "Financial literacy and Investment decisions of UAE investors", The Journal of Risk Finance, Vol. 10 Iss: 5, pp.500 – 516
4. Christiansen et al. (2006). Investors "higher education in stock market", The Journal of Finance.
5. Elder and Rudolph (2003). "Rutledge Studies In Human Resource Development" ISBN: 978-0-415-82909-0.
6. Kabra, G., Mishra, Prashant K. & Dash, Manoj K. (2010). Factors Influencing Investment Decisions of Generations in India: An Econometric Study. Asian Journal of Management Research, 1(1), 308-328
7. Kiran, D & Rao, U.S (2004). Identifying investor group segments on demographic and pschographic characteristics. Retrieved on Dec24, 2012 at <http://ssrn.com/abstract=870749>.
8. Kaia Kask (2005), "The influence of Investor's Behavior and Organizational Culture on Value Investing". Research paper.
9. Lei Feng and Mark S. Seasholes (2007). Individual investors and gender similarities in an emerging stock market, Pacific-Basin Finance Journal, Online version posted on 4 May 2007.
10. NSDA Investor Education Foundation (2006). Gender Difference in investment behavior. Funded by NSDA Investor Education Foundation Grants Program, 1-109.
11. K. Prabhakaran and P. Karthika (2011), a study on Risk Perception and Portfolio Management of Equity Investors in Coimbatore City. Volume available at web.com
12. Rajarajan, V. (2002). Investor's Demographic and Risk Bearing Capacity. Finance India, 17(2), 565-576.
13. Shanmugasundaram V, the impact of behavioral bias of investors in Capital market, South Asia Journal of Social, Political Studies, SAJOSPS, Vol.10, No1, pp.99-102
14. Sharon Collard (2009). Individual Investment behavior- A brief review of research- University of Bristol: Conducted by personal Finance Research Centre.
15. Sen Shankar Sorn and Gosh Santanu Kumar (2006), Stock market liquidity and sudden changes in risk factors. Available at web.com
16. Shaman and Dr. D. P. Warne (2012). Investment Behavior of Individual Investors in Stock Market. Volume 2, Issue 2 (February 2012) IJRFM; ISSN 2331-5985.