The Influence of Demographic Factors on the Investment Objectives of Retail Investors in the Nigerian Capital Market

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Abstract

Demographic factors, as a group have been found to determine the type and level of investment an investor makes. The aim of this paper is to determine the influence of demographic factors on the investment objectives of retail investors in the Nigerian capital market. Primary data was obtained through a structured questionnaire administered on 180 respondents and analyzed with simple descriptive techniques. Chi-square test and correlation analyses were conducted to assess the effect of demographic factors on the investment objectives of retail investors in the Nigerian capital market. The results reveal that investors' employment status and income are the most influencing factors on their investment objectives. While income has significant effect on all investment objectives, employment status has significant effect on all investment objectives with the exception of diversification objective. Educational qualification of investors has a significant effect on security investment objective. Demographic factors like gender, age, marital status and capital market. These findings should assist capita market operators when advising their clients on where to invest. They should also act as a guide to policy makers in coming up with policies aimed at repositioning the Nigerian capital market for more efficient fund mobilization for investment in the economy.

Keywords: Demographic factors, Retail investors, Investment objectives, Nigerian capital market.

1. Introduction

Investment objectives of individual or retail investors refer to their financial goals and are related to what they want to achieve with their portfolio of investments. Thus, an investor may want to maximize current income, maximize capital gains or set a middle course of current income along with some capital appreciation. It is also possible for an investor's investment objective to be for purely speculative reasons. When an investor is able to clearly define his investment objectives, it becomes easier to determine the investment strategy or plan of attack to achieve the objectives.

The investment objectives are generally concerned with return and risk considerations. These two objectives go hand in hand, as the risk of an investment determines how high an investor can set the return objective. The investment objectives of retail investors are closely tied to their risk tolerance – that is the extent to which they are willing to accept more risk in exchange of a higher return.

The appetite for risk is usually a factor of the socioeconomic or demographic characteristics of investors, such as age, gender, marital status, family responsibilities, education and investment experience. For example, the older an investor gets, the more likely he or she will have more people relying on him or her for support and so the more risk-averse or less risk-tolerant he or she will be. Also some studies (Al-Ajmi, 2008; Kabra, Mishra & Dash, 2010) have shown men to be less risk-averse than women, even as Muhammad and Hafiz (2014) reported that gender had no effect on investors' level of risk tolerance.

Most studies were tailored at finding the impact of demographics on investors' risk tolerance level rather than on their investment objectives, although the two go hand in hand. The author did not come across any study that specifically addressed any of these issues in Nigeria and this necessitated the need for this study.

This study is therefore designed to determine the impact of demographic variables of Nigerian retail investors on their choice of investment objectives. An understanding of the differences that may exist between different demographic groups will be of benefit to stockbrokers and investment managers. This will assist them in advising their clients on the appropriate investment portfolio that best meets their needs and aspirations. It will also be of benefit to company management on what investors require in terms of returns so as to attract potential investors to invest in the company stocks. Capital market regulators are not left out as this information will be a guide in coming up policies to enhance capital mobilization in the Nigerian capital market.

2. Review of Literature

Although the options for investing in the capital market are continually increasing, all investment vehicles can be classified or categorized according to three fundamental characteristics – income, safety and growth – which correspond to types of investment objectives. Investment objectives of retail investors are closely tied to their risk tolerance, and their appetite for risk or lack of it, is frequently a factor of some socioeconomic or

demographic characteristics of investors, such as age, gender, marital status, family responsibilities, education and investment experience. Different studies have been conducted in different countries to determine the impact of demographic factors on investment preferences and objectives and some have come up with contradicting results.

Age, gender, income and education have been shown to significantly influence investment objectives of retail investors. Lease, Lewellen and Schlarbaum (1974) working with investors in the United States found that significant positive correlation existed between age and the percentage of portfolio invested in income securities. Lewellen, Lease and Schlarbaum (1977) found that age, gender, income and education affect investors' preferences and attitudes towards investment decisions based on their investment objectives. They showed that age has a strong influence on the investment goals of the investors. Older investors were found to have interest in long-term capital gains, while young investors preferred short-term capital gains. Findings by Graham and Kumar (2006) in their evaluation of portfolio holdings of retail investors of older and low income categories showed that these investors prefer dividend-paying stocks. Wang and Hanna (1999) reported that relative risk aversion decreased as people aged (that is, the proportion of net wealth invested in risky assets increases as people age) when other variables are held constant. Grable and Lytton (1999) agree that older people are more risk-tolerant than younger ones. This contrasts with Jain and Mandot (2012) who found a negative correlation between age and risk-tolerance level. Similarly, Muhammad and Hafiz (2014) found a slight negative correlation between age and risk-tolerance. They reported that increase in age at one point caused a negative effect on risktaking behaviour of investors. Another study (Al-Ajmi, 2008) found no significant relationship between age and risk-tolerance. Similarly, Das and Jain (2014) found no association between investors' age and the return, risk and tax objectives of investment. They however found an association between age and retirement objective of investment.

Lease, Lewellen and Schlarbaum (1974) found a significant negative correlation between annual income and percentage of portfolio invested in income securities. That is, the lower the annual income of an investor the more likely he is to invest in income securities. MacCrimmon and Wehrung (1986) found that financial wealth has significant and positive impact on the average level of risk chosen in a portfolio.

Grable and Lytton (1999) reported that educational level and personal finance knowledge were significant in explaining differences between levels of risk tolerance. They find that investors with higher education and knowledge about financial markets were more likely to invest in risky assets. Similarly, Al-Ajmi (2008) found that less educated investors are less likely to take risks. Das and Jain (2014) found that out of the four investment objectives they considered in their study only the return objective had any association with education. This means that with different educational qualification the ability to choose the investment will vary depending on the return benefits that different investment avenues provide. The risk, retirement and tax investment objectives had no association with education.

Differences in risk tolerance have been observed between males and females. Barber and Odean (2001) and Al-Ajmi (2008) found significant differences between males and females on their risk tolerance during financial decisions. Al-Ajmi (2008) found that men are less risk-averse than women. According to Barber and Odean (2001), men were less emotional than women and so are more confident in their investment decisions. They also had more financial knowledge and wealth and ability to take risks. In contrast, Jain and Mandot (2012) and Muhammad and Hafiz (2014) in their studies with investors in Rajasthan and Pakistan respectively found no difference in risk tolerance levels between males and females as gender had no significant effect on risk tolerance. Das and Jain (2014) in their study found that males and females have different objectives in mind when choosing investment avenues.

Marital status is another factor influencing investors' investment decisions. Single people are more likely to take risks than married people because they are less likely to have dependants and responsibilities. Barber and Odean (2001) reported that single investors were more risk-taking than the married investors. Jain and Mandot (2012) also found that marital status had a significant effect as married investors were less risk-tolerant than single investors. However, Muhammad and Hafiz (2014) found no significant association between marital status and risk tolerance.

Occupational status of investors has also been shown to exert influence on their risk-taking capacity. Roszkowski et al. (1993), cited in Muhammad and Hafiz (2014), reported that investors with higher ranking occupational status are more risk-seeking than those with lower occupational status. MacCrimmon and Wehrung (1986) showed that business people take more risk than salary earners. Jain and Mandot (2012) found an association between investors' occupation and their risk-tolerance. Muhammad and Hafiz (2014) found no effect of occupation on investors' risk tolerance. Das and Jain (2014) found that return, retirement and tax objectives of investment are influenced by occupation, but risk objective was not influenced by occupation.

From the review, demographic factors had differing influences on different investment objectives pursued by investors. Studies on the impact of demographic factors on investors' investment objectives in Nigeria were virtually nonexistent. Thus, there is need to fill this gap.

3. Methodology

A structured questionnaire was used to obtain primary data for the study. Out of the 180 questionnaires given out, 130 were returned giving a response rate of 72.2%. Respondents were retail investors in the Nigerian capital market drawn from three cities- Lagos, Abuja and Jos- to give a near representation of investors from the Northern and Southern parts of the country.

The questionnaire was in two sections. In the first section respondents were asked to provide demographic information such as age, gender, marital status, employment status, educational qualification, income/salary per month and years of capital market investing. In the second section respondents were asked to provide information on their investment objectives.

The investment objectives are the dependent variables while the demographic factors which include age, gender, marital status, employment status, educational qualification, monthly income, and capital market experience are the independent variables.

Using a 5-point Likert-type scale, respondents were asked to evaluate the importance of six variables which were identified from survey of literature and personal interviews with investors and financial experts as the investment objectives of investors in the capital market. There were 5 choices against each of the variables ranging in varying degrees from 1 to 5, where 1 represents 'Not important' to 5 representing 'Very important' depending on the influence of the variable on the investor's motivation to invest in the capital market. The six investment objectives were 'short-term price increase', 'long-term price increase', 'security reasons', 'dividend income', 'speculative purposes' and 'diversification purposes'. The data was analyzed using descriptive techniques such as frequencies and percentages. Chi-square test was conducted with cross-tabulations and simple contingency tables to determine the significance of any relationship between the demographic characteristics and the research objectives of investors. Correlation analysis was also carried out to identify the nature of association between the dependent and independent variables.

SPSS version 21 statistical software was used to carry out the analyses.

The following null hypotheses were tested to confirm if demographic factors had any influence on the investment objectives of retail investors.

H_{o1}: There is no significant effect of gender on the investment objectives of retail investors.

H₀₂: There is no significant effect of age on the investment objectives of retail investors.

H₀₃: There is no significant effect of marital status on the investment objectives of retail investors.

H₀₄: There is no significant effect of employment status on the investment objectives of retail investors.

 H_{05} : There is no significant effect of educational qualification on the investment objectives of retail investors.

H_{o6}: There is no significant effect of income/salary on the investment objectives of retail investors.

 $H_{\sigma7}$: There is no significant effect of capital market investing experience and the investment objectives of retail investors.

The hypotheses were tested at the 5% level of significance.

4.0 Results and Discussions

4.1 Demographic Characteristics of Respondents

Table 1 shows the demographic characteristics of respondents

Domographia Variable	Engranav	Doncont
Demographic variable	Frequency	Percent
Gender:		
Male	97	74.6
Female	33	25.4
Total	130	100.0
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18 25	1	0.8
26.25	14	0.8
20-55	14	10.9
36-45	4/	36.7
46-55	50	39.1
56-65	11	8.6
Above 65	5	3.9
Total	128	100.0
Missing System	2	
Total	130	
	150	
Marital Status:	1.4	10.0
Single	14	10.8
Married	112	86.2
Divorced	4	3.1
Total	130	100.0
Employment Status:		100.0
Company Employed	45	24.0
	43	34.9
Government Employed	42	32.6
Self Employed	32	24.8
Seeking Employment	1	0.8
Retired	7	5.4
Student	2	1.6
Total	129	100.0
Missing System	1	100.0
	1	
lotal	130	
Education:		
Primary Six Certificate	1	0.8
SSCE/WASC	2	1.6
OND/ND	5	3.9
NCE	1	0.8
HND	18	14.0
	10	14.0
B.SC/BA	37	28.7
Post-graduate	65	50.4
Total	129	100.0
Missing System	1	
Total	130	
Income/Salary per month:		
Below ¥100 000	25	20.0
N100,000	23	20.0
11100,000-200,000	37	29.0
₩200,000-300,000	23	18.4
₩300,000-400,000	13	10.4
₩400,000-500,000	7	5.6
Above №500,000	20	16.0
Total	125	100.0
Missing System	5	
Total	120	
	150	
Capital Market Investing Experience:	. –	
0-5 years	17	13.1
6-10 years	58	44.6
11-15 years	20	15.4
16-20 years	20	15.4
More than 20 years	15	11.5
Total	120	100.0
10(a)	150	100.0

Source: Field Survey, 2014

4.2 Hypotheses Testing

a.) Association between investors' gender and investment objectives

H_{o1}: There is no significant effect of gender on the investment objectives of retail investors

Table 2 shows the summary of the results of Chi-square test while table 3 shows correlation results for investors' gender and each of the six investment objectives.

Test	Investment Objective	Value	Df	Sig (2-sided)
Pearson Chi-square	Short term price increase	9.435	4	.051
Pearson Chi-square	Long-term price increase	6.362	4	.174
Pearson Chi-square	Security	4.344	4	.361
Pearson Chi-square	Dividend	6.055	4	.195
Pearson Chi-square	Speculation	4.353	4	.360
Pearson Chi-square	Diversification	4.374	4	.358

Table 2: Chi-square Test Summary - Gender

* Significant at 5%

Table 3: Summary of Correlations - Gender

Test	Investment Objective	Pearson Correlation	Sig (2-sided)
Pearson Correlation	Short term price increase	.137	.129
Pearson Correlation	Long-term price increase	.163	.070
Pearson Correlation	Security	.145	.106
Pearson Correlation	Dividend	.135	.134
Pearson Correlation	Speculation	.148	.100
Pearson Correlation	Diversification	.099	.275

* Significant at 5%

From table 2, gender has no effect on any of the investment objectives at 5% significance level. We accept our null hypothesis that there is no effect of gender on investment objectives. This means that males and females have similar response to investment objectives. From the correlation results, there is positive but insignificant correlation between gender and investment objectives.

b.) Association between investors' age and investment objectives

H_{o2}: There is no significant effect of age on the investment objectives of retail investors.

Table 4 shows the summary of the results of Chi-square test and table 5 shows the correlations between investors' age and each of the six investment objectives.

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Table 4.	Chi_square	Test Summary - Ag	e
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Test	Investment Objective	Value	Df	Sig (2-sided)	
Pearson Chi-square	Short term price increase	15.115	20	.770	
Pearson Chi-square	Long-term price increase	19.027	20	.520	
Pearson Chi-square	Security	22.215	20	.329	
Pearson Chi-square	Dividend	26.265	20	.157	
Pearson Chi-square	Speculation	26.103	20	.162	
Pearson Chi-square	Diversification	19.823	20	.469	

* Significant at 5%

Tab	le 5:	Summary	of	Corre	lations	- Age

Test	Investment Objective	Pearson	Sig (2-sided)
		Correlation	
Pearson Correlation	Short term price increase	.124	.172
Pearson Correlation	Long-term price increase	.162	.075
Pearson Correlation	Security	.131	.146
Pearson Correlation	Dividend	.147	.105
Pearson Correlation	Speculation	.132	.144
Pearson Correlation	Diversification	.165	.070

*Significant at 5%

From table 4 p-values are not significant at 5% for age and investment objectives. We accept the null hypothesis that age has no effect on investment objectives. From table 5, there is positive, though insignificant positive correlation between age and investment objectives.

c.) Association between investors' marital status and investment objectives

H₀₃: There is no significant effect of marital status on the investment objectives of retail investors.

The summary of the results of Chi-square test for associations between investors' marital status and each of the six investment objectives is shown on table 6, while the summary of correlations is shown on table 7.

Table 6 [.]	Chi-square	Test	Summary	v – Marital Status
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Test	Investment Objective	Value	Df	Sig (2-sided)
Pearson Chi-square	Short term price increase	5.166	8	.740
Pearson Chi-square	Long-term price increase	10.296	8	.245
Pearson Chi-square	Security	9.984	8	.266
Pearson Chi-square	Dividend	14.555	8	.068
Pearson Chi-square	Speculation	10.603	8	.225
Pearson Chi-square	Diversification	8.538	8	.383

*Significant at 5%

Table 7: Summary of Correlations – Marital Status

Test	Investment Objective	Pearson Correlation	Sig (2-sided)
Pearson Correlation	Short term price increase	042	.641
Pearson Correlation	Long-term price increase	001	.995
Pearson Correlation	Security	076	.399
Pearson Correlation	Dividend	010	.915
Pearson Correlation	Speculation	038	.677
Pearson Correlation	Diversification	.114	.206

*Significant at 5%

From table 6, Chi-square is not significant for any of the investment objectives at 5% level of significance. Table 7 reveals that there is negative but insignificant correlation between marital status and investment objectives with the exception of diversification purposes which showed positive and insignificant correlation. We uphold the null hypothesis that there is no significant effect of marital status on investment objectives.

d.) Association between investors' employment status and investment objectives

H₀₄: There is no significant effect of employment status on the investment objectives of retail investors.

Table 8 shows the summary of the results of Chi-square test and table 9 shows the summary of correlations between investors' employment status and each of the six investment objectives.

Tuble 6: Chi square Test Summary Employment Status					
Test	Investment Objective	Value	Df	Sig (2-sided)	
Pearson Chi-square	Short term price increase	32.616	20	.037*	
Pearson Chi-square	Long-term price increase	34.602	20	.022*	
Pearson Chi-square	Security	38.155	20	.008*	
Pearson Chi-square	Dividend income	32.105	20	.042*	
Pearson Chi-square	Speculation	49.983	20	.000*	
Pearson Chi-square	Diversification	25.294	20	.190	

Table 8: Chi-square Test Summary – Employment Status

*Significant at 5%

Table 9: Summary of Correlations - Employment Status

Test	Investment Objective	Pearson Correlation	Sig (2-sided)	
Pearson Correlation	Short term price increase	.170	.060	
Pearson Correlation	Long-term price increase	.232	.010*	
Pearson Correlation	Security	.199	.026*	
Pearson Correlation	Dividend income	.220	.014*	
Pearson Correlation	Speculation	.156	.084	
Pearson Correlation	Diversification	.094	.302	

*Significant at 5%

From table 8, Chi-square is significant at 5% between employment and five investment objectives namely, short-term price increase, long term price increase, security, dividend income and speculation and insignificant for diversification purposes. We reject the null hypotheses for effect of employment on the five investment objectives and accept the null hypothesis for effect of employment on diversification purposes. This means that employment status has significant effect on short-term price increase, long term price increase, security, dividend income and speculation investment objectives and no effect on diversification objective. From table 9, employment status has positive and significant correlations for long-term price increase, security and dividend income and positive but insignificant correlations with short-term price increase, speculation and diversification purposes.

e.) Association between investors' educational qualification and investment objectives

 H_{o5} : There is no significant effect of educational qualification on the investment objectives of retail investors. Table 10 shows the summary of the results of Chi-square test and table 11 shows correlations for associations between investors' educational qualification and each of the six investment objectives.

Test	Investment Objective	Value	Df	Sig (2-sided)
Pearson Chi-square	Short term price increase	20.822	24	.649
Pearson Chi-square	Long-term price increase	28.693	24	.232
Pearson Chi-square	Security	40.868	24	.017*
Pearson Chi-square	Dividend	31.874	24	.130
Pearson Chi-square	Speculation	27.316	24	.290
Pearson Chi-square	Diversification	33.333	24	.097

Table 10: Chi-square Test Summary – Educational Qualification

*Significant at 5%

Table 11: Summary of Correlations — Educational Qualification

Test	Investment Objective	Pearson Correlation	Sig (2-sided)
Pearson Correlation	Short term price increase	.089	.325
Pearson Correlation	Long-term price increase	.128	.157
Pearson Correlation	Security	.139	.122
Pearson Correlation	Dividend	.111	.220
Pearson Correlation	Speculation	.145	.108
Pearson Correlation	Diversification	.196	.029*

*Significant at 5%

From table 10 Chi-square is significant at 5% level of significance for educational qualification and security. We reject the null hypothesis for effect of educational status on security investment objective. This means that educational qualification has effect on security investment objective. From table 11 the correlation is positive but insignificant. However there is positive and significant correlation between educational qualification and diversification purpose.

f.) Association between investors' income/salary and investment objectives

H_{o6}: There is no significant effect of income/salary on the investment objectives of retail investors.

Table 13 shows the summary of the results of Chi-square test and table 14 shows the summary for correlations between investors' educational qualification and each of the six investment objectives.

 Table 13: Chi-square Test Summary – Income/Salary

Test	Investment Objective	Value	Df	Sig (2-sided)
Pearson Chi-square	Short term price increase	37.193	20	.011*
Pearson Chi-square	Long-term price increase	41.995	20	.003*
Pearson Chi-square	Security	40.026	20	.005*
Pearson Chi-square	Dividend	39.303	20	.006*
Pearson Chi-square	Speculation	42.965	20	.002*
Pearson Chi-square	Diversification	35.897	20	.016*

*Significant at 5%

Table 14: Summary of Correlations - Income/Salary

Test	Investment Objective	Pearson Correlation	Sig (2-sided)
Pearson Correlation	Short term price increase	.105	.252
Pearson Correlation	Long-term price increase	.161	.081
Pearson Correlation	Security	.132	.150
Pearson Correlation	Dividend	.144	.117
Pearson Correlation	Speculation	.076	.409
Pearson Correlation	Diversification	.189	.040*

*Significant at 5%

From table 13 Chi-square is significant at 5% level of significance for income/salary and all investment objectives. We reject the null hypothesis that there is no significant effect of income/salary on investment objectives and accept the alternative that income/salary has effect on all the investment objectives of retail investors. From table 14, income/salary has positive though insignificant correlations with all investment objectives, except diversification which has positive and significant correlation with income/salary.

g.) Association between investors' capital market experience and investment objectives

 H_{07} : There is no significant effect of capital market experience on the investment objectives of retail investors. Table 15 shows the summary of the results of Chi-square test and table 16 shows the correlations for associations between investors' capital market experience and each of the six investment objectives.

Test	Investment Objective	Value	Df	Sig (2-sided)
Pearson Chi-square	Short term price increase	15.985	16	.454
Pearson Chi-square	Long-term price increase	20.759	16	.188
Pearson Chi-square	Security	18.471	16	.297
Pearson Chi-square	Dividend	22.737	16	.121
Pearson Chi-square	Speculation	18.004	16	.324
Pearson Chi-square	Diversification	15.821	16	.466

Table 15: Chi-square Test Summary – Capital Market Experience

*Significant at 5%

Table 10. Summary of Correlations - Capital Market Experience				
Test	Investment Objective	Pearson Correlation	Sig (2-sided)	
Pearson Correlation	Short term price increase	.052	.563	
Pearson Correlation	Long-term price increase	.013	.883	
Pearson Correlation	Security	.000	1.000	
Pearson Correlation	Dividend	.020	.826	
Pearson Correlation	Speculation	.019	.830	
Pearson Correlation	Diversification	.052	.569	

Table 16: Summary of Correlations - Capital Market Experience

*Significant at 5%

From table 15 Chi-square results are insignificant at 5%. We accept the null hypothesis that there is no significant effect of capital market experience on the investment objectives of investment. This means that the number of years in the capital market has no effect on the investment objective of investors. From table 16 positive but insignificant correlations exist between capital market experience and investment objectives.

5. Conclusion

From this study, we can conclude that demographic characteristics do have an influence on the investment objectives of retail investors. The results reveal that investors' employment status and income are the most influential factors on their investment objectives. While income has significant effect on all investment objectives, employment status has significant effect on all investment objectives with the exception of diversification objective. There were positive and significant correlations between employment status and long-term price increase, security and dividend income investment objectives. Educational qualification of investors has a significant effect on security objective.

From this study, demographic factors like gender, age, marital status and capital market experience have no significant effect on the investment objectives of retail investors in the Nigerian capital market. We can conclude that having a job or a business and regular income are the most important demographic factors that influence investors to invest in the capital market.

The implication of this finding is that with the current high unemployment levels in the country, mobilizing sufficient funds from the capital market for the diversification programme of the Federal Government will be quite daunting. There is need to put measures in place that will foster a conducive environment for employment creation in all sectors of the economy. Government can start by ensuring that necessary infrastructures such as electricity, good roads, water, among others are in place. It is only when the average Nigerian investor has a regular source of income that he or she can begin to think of investing in the capital market.

References

- Al-Ajmi, J. A. (2008). Risk tolerance of individual investors in an emerging market. *International Research Journal of Finance and Economics*, 17(2), 15-26.
- Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence and common stock investment. *Quarterly Journal of Economics*, 116(1), 261-292.
- Das, S., & Jain, R. (2014). A study on the influence of demographic variables on the factors of investment A perspective on the Guwahati Region. *IMPACT: International Journal of Research in Humanities, Arts and Literature, 2*(6), 97-102.
- Grable, J. E., & Lytton, R. H. (1999). Assessing financial risk tolerance: Do demographic socioeconomic and attitudinal factors work? Family Relations and Human Development/ Family Economics and Resource Management Biennial, 1-9.
- Graham, J., & Kumar, A. (2006). Do dividend clients exist? Evidence of dividend preferences of retail investors. *Social Science Research Network*. Available from http://papers.ssm.com/sol/papers.cfm?abstract_id=482563

- Jain, D., & Mandot, N. (2012). Impact of demographic factors on investment decision of investors in Rajasthan. Journal of Arts, Science and Commerce, 3(2,3), 81-92.
- Kabra, G., Mishra, P. K., & Dash, M. K. (2010). Factors influencing investment decisions of generations in India: An econometric study. *Asian Journal of Management Research*. 1(1), 308-328.
- Lease, R. C., Lewellen, W. G., & Schlarbaum, G. G. (1974). The individual investor: Attributes and attitudes. *The Journal of Finance*, 29(2), 413-433.
- Lewellen, W. G., Lease, R. C., & Schlarbaum, G. G. (1977). Patterns of investment strategy and behaviour among individual investors. *Journal of Business*, 50, 296-333.
- MacCrimmon, K. R., & Wehrung, D. A. (1986). Taking Risks. New York: The Free Press.
- Muhammad, N. S., & Hafiz, M. I. (2014). The effect of demographic factors on the behaviour of investors during the choice of investment: Evidence from twin cities of Pakistan. *Global Journal of Management* and Business Research, 14(111), 46-56.
- Wang, H., & Hanna, S. (1997). Does risk tolerance decrease with age? *Financial Counseling and Planning*, 8(2),27-32.