MANAGEMENT DYNAMICS
A Peer-reviewed Journal of Management and Economics
Published by
Shanker Dev Campus
Tribhuvan University, Nepal

Does Equity Investment Decision Differ among Demographic Characteristics of the Investors?

Mohan Prasad Sapkota
PhD Scholar, Faculty of Management, Tribhuvan University, Nepal
mohansapkota24@gmail.com / https://orcid.org/0000-0003-4945-3070

Dilli Raj Sharma
Professor, Faculty of Management, Tribhuvan University, Nepal
Email: dr777sharma@gmail.com / https://orcid.org/0009-0001-4453-6849

Jeetendra Dangol
Associate Professor, Faculty of Management, Tribhuvan University, Nepal
Email: jdangol@gmail.com / https://orcid.org/0000-0002-5863-8977

Article Info:
Received: 12 Feb. 2024
Revised: 17 May 2024
Accepted: 15 June 2024

DOI: https://doi.org/10.3126/md.v27i1.80785

Keywords:
Demographic character; Equity; Gender; Investment decision; Investors; Profession; and Qualification

ABSTRACT

This study aims to examine the differences in equity investment decisions among demographic characteristics of the respondents. This study is based on quantitative research approach with descriptive cum analytical research design. This study utilizes purposive sampling technique. The total sample size from management faculty, chartered account and staff from investment companies of this study is 770. However, final usable responses are 497 representing 64.55 percent response rate. This study utilizes descriptive statistics, independent sample t-test, and ANOVA test. This study found that investment decision between male and female is significant different. Similarly, investment decision of divorced investors is significantly differed from single, marriage and others. However, investment decisions are not significantly differed from academic qualification, and profession of the respondents. Finally, this study reveals that investment decisions is different among different demographic characteristics especially gender and marital status of the investors. Hence, this study concluded that investors' financial decisions are shaped by their personal, social and academic background.

1. INTRODUCTION

Nepalese financial market has been widespread after adopting the structural reform program and privatization of the Nepalese economy. However, due to change in external financial environment, lower industries, and weak governance, Nepalese financial system faces several challenges. In today's dynamic and complex financial environment, individuals are gradually anticipated to make informed investment decisions to ensure long-term financial security, adequate return, capital formulation and wealth accumulation (Lusardi & Mitchell, 2014). Conventional finance theory assumes that investors are rational and they make every decision rationally (Fama, 1970; Pompian, 2012). Furthermore, Fama (1970) explained that stock price adjusts all the information as per market efficiency and there is no possibility of gaining abnormal return. However, some encounters on efficient market hypothesis (EMH) have been seen in the market place especially anomalies (Pompian, 2012) as indiscretions or patterns in stock market that contradict the conventions of EMH and rational principle (Thaler, 1987). Consequently, when market violates the rational principles, psychological and behavioural factors play the essential role for individuals and/or markets towards stock investment decisions (Thaler, 1999; Ritter, 2003). Hence, each individual is unique and make decisions uniquely and guided by their own biases (Sapkota & Bhandari, 2022; Sapkota & Bhandari, 2023). Hence, investment decisions are highly influence by behavioural and psychological factors (Sapkota, 2022; Sapkota & Chalise, 2023). Therefore, evidences have signified that investment behaviour of the investors are not homogeneous across population; rather it is significantly different form demographic characteristics like age, gender, education, income, marital status, and profession (Sahu & Rajasekar, 2017; Al-Tamimi & Kalli, 2009). Hence, these factors shape individuals' financial goals, risk tolerance, and assess to investment opportunities.

Although several studies have been conducted to examine the investment behaviour in developed economies, there still remains a lack of contextual understanding in emerging markets, where the levels of financial literacy, social and cultural norms, and differences in socioeconomic structures (Beckmann, 2013). Acknowledging how demographic dimensions have pivotal role while making investment decision for policymakers, financial advisors, and educational institutions focusing to promote financial inclusion (OECD, 2020). As per the best knowledge of researchers' there no depth evidences that deal about investment decisions differs as per demographic characteristics of informed investors in Nepal. Hence, this study aims to examine the differences of investment decisions among demographic profile of the respondents in Nepal. The findings are expected to deliver the targeted financial literacy programs and investment strategies.

The first section of this study is the introduction of the study, second segment is the research methods, third is the results and discussion sections after then conclusion and implications are incorporated. And finally, references are incorporated.

2. RESEARCH METHODS

This study is based on quantitative research approach with descriptive and analytical research design. The total number of the investors who participate in stock investment decisions from management faculty, chartered accountant and staff from investment companies are considered as population of the study are unknown. The minimum sample size recommended by Cochran (1977) is 385 for unknown population. However, this study utilized two times of minimum required sample size (385 × 2 = 770). This study utilized purposive sampling to collect the responses from the target population. The total responses collected from respondents were 617. However, final usable responses after deletion of incomplete and error responses were only 497 representing 64.55 percent response rate. Questionnaires were developed based on literature, experts' recommendations, and characteristics of the variables in both Nepali and English language. 7-points, Likert type including demographic characteristics, self-administered, closed-end questionnaires were utilized through delivery and collect technique. For the validity and reliability of the survey, pre-testing and pilot testing of questionnaires were performed to the target population. Finally, data were analysed by utilizing descriptive statistics, inferential statistics including independent sample t-test, ANOVA test, and post-hoc LSD through SPSS-25, R-studio, and MS Excel. The Cronbach alpha and average variance extracted (AVE) were utilized to assess the reliability and validity of the responses. Any items having factor loadings with less than 0.70 having AVE of less than 0.50 are necessary to remove from the study to improve validity (Hair et al., 2019). Finally, the detailed of the descriptive statistics, reliability and validity analysis were documented into Table 1.

Table 1

Descriptive Statistics, Reliability and Validity Analysis of the Constructs

Construct	Items	Mean	Std. Dev.	Alpha	AVE
EID	7	5.050	0.908	0.810	0.517

Notes: Field Survey, 2024

Table 1 depicts the descriptive statistics of equity investment decision including mean of 5.050 which is striving towards agree with standard deviation of 0.908. The Cronbach alpha of equity investment decision (EID) is higher than 0.70 indicates that it is reliable as well as average variance extracted (AVE) is higher than 0.50 indicates that it is valid (Hair et al., 2019).

3. RESULTS AND DISCUSSION

This section highlights the findings based on the collected data from the respondents. In this section, demographic characteristics of the respondents, independent sample t-test, ANOVA test, and post-hoc LSD test were utilized.

3.1 Demographic Characteristics of the Respondents

It contains the basic background information of the respondents of the study. It presents the basic characteristics and who are the participants to provide the contextual information for data analysis. The detailed of the demographic characteristics of the respondents are presented into Table 2.

Table 2

Demographic Characteristics of the Respondents

Dimension	Characteristics	Frequency	Percent
Gender	Male	369	74.20
	Female	128	25.80
Marital Status	Single	180	36.20
	Married	307	61.80
	Divorced	4	0.80
	Others	6	1.20
Academic Qualification	Bachelor	53	10.70
	Master	393	79.10
	M. Phil.	35	7.00
	Ph. D.	16	3.20
Profession	Management Faculty	323	65.00
	Chartered Accountant	98	19.70
	Investment Companies	76	15.30
	Total	**497**	**100.00**

Note: Field Survey, 2024

Table 2 depicts the demographic characteristics of the respondents. Majority of the respondents (male =74.20 % and female = 25.80 %) spell that this study mostly covers the irrational decisions of the male compared to female. Similarly, majority of the respondents are married (61.80 %) might be necessity of fulfilment of family needs and future demands of fund. Likewise, majority of the respondents having academic qualification of master or above indicates that they have sound knowledge of financial market. Additionally, majority of the respondents are from faculties indicate that they have much time available to participate in the stock market. Furthermore, most of the respondents have 25 years or above age indicates that they have necessity to generate additional income to fulfil their own and family needs.

3.2 Gender and Investment Decision

An independent sample t-test was conducted to compare the investment decision for Male and Female. The Levene's test was utilized to examine the equality in the variance and result shows that there is an unequal variance among the mean of investment decisions between male and female ($F = 1.632$, p value = 0.202). Furthermore, there were significant differences [$t(495) = -2.023$, $p = 0.0440$] in the investment decision scores for Male ($M = 5.002$, $SD = 0.929$)

was lower than Female (M = 5.189, SD = 0.830). The magnitude of the differences in the means (mean difference = -0.187, 95% CI: -0.370 to -0.005) was significant. The detailed of the results from independent sample t-test of investment decision between Male and Female is presented into Table 3.

Table 3

Independent Sample t-test between Gender and Investment Decisions

Gender	N	Mean	Std. Deviation	Levene's Test		t-test for Equality of Means				
				F	Sig.	t	df	Sig.	95% Confidence Interval	
									Lower	Upper
Male	369	5.002	0.929	1.632	**0.202**	-2.023	495	**0.044**	-0.370	-0.005
Female	128	5.189	0.830							

Note: Field Survey, 2024

Table 3 depicts that investment decision between male and female is significantly difference. Furthermore, it shows that females have higher irrational decisions compared to males that might due to females are less involvement in the financial decisions and markets as well as mostly female are heavily participant in household and family activities.

3.3 Marital Status and Investment Decision

A one-way ANOVA test was conducted to compare the effect of marital status on irrational equity investment decisions of the investors. The results exhibited a statistically insignificant difference in irrational investment decision across marital status groups, F (3, 493) = 1.963, p = 0.119). The detailed of the ANOVA analysis of investment decision on marital status is presented into Table 4.

Table 4

ANOVA Analysis of Investment Decision on Marital Status

Groups	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4.822	3	1.607	1.963	**0.119**
Within Groups	403.683	493	0.819		
Total	408.505	496			

Note: Field Survey, 2024

Table 4 depicts the ANOVA analysis of investment decision based on marital status and results shows that there is no significant difference among groups. Furthermore, the post-hoc LSD analysis was conducted to examine the differences in investment decisions among

groups. The detailed of the post-hoc LSD result of investment decisions among marital status is presented into Table 5.

Table 5

Post-hoc LSD Analysis of Investment Decision among Marital Status

Group	Marital Status	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Single	Married	0.030	0.085	0.723	-0.137	0.197
	Divorced	-1.049*	0.457	0.022	-1.948	-0.150
	Others	0.192	0.376	0.609	-0.546	0.930
Married	Divorced	-1.079*	0.455	0.018	-1.974	-0.184
	Others	0.162	0.373	0.665	-0.571	0.895
Divorced	Others	1.241*	0.584	0.034	0.093	2.388

Note: Field Survey, 2024

Table 5 displays the result of post-hoc LSD analysis and evidences depict that the irrational investment decision between single and divorced (mean difference = -1.049, p value = 0.022, 95% CI: -1.948 to -0.150); married and divorced (mean difference = - 1.079, p value = 0.018, 95% CI: 1.974 to -0.184); divorced and others (mean difference = 1.241, p value = 0.034, 95% CI: 0.093 to 2.388) is significantly difference. Hence, this result signify that the investment decision of the divorce investors is significant difference to other groups of marital status.

3.4 Academic Qualification and Investment Decisions

One way ANOVA analysis of investment decision based on academic qualification was conducted and results show that there is no significant difference [F (3, 393) = 0.579, p value = 0.629) among groups based on academic qualification. Furthermore, the post-hoc LSD analysis was conducted to examine the differences in investment decisions among groups of academic qualification. The detailed of the ANOVA result is presented into Table 6.

Table 6

ANOVA Analysis of Investment Decision among Academic Qualification

Group	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.433	3	0.478	0.579	**0.629**
Within Groups	407.072	493	0.826		
Total	408.505	496			

Note: Field Survey, 2024

Table 6 displays the result of ANOVA test of investment decisions as per academic qualification and found that investment decisions as per academic qualification is not differ significantly. However, the post-hoc LSD is also utilized to examine any difference with in the group of

academic qualification. The detailed of the post-hoc LSD result of investment decisions and academic qualification is documented into Table 7.

Table 7

Post-hoc LSD Analysis of Investment Decision among Academic Qualification

Qualification	Qualification	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					LB	UB
Bachelor	Master	-0.010	0.133	0.941	-0.271	0.251
	M. Phil.	0.082	0.198	0.679	-0.307	0.471
	Ph. D.	0.272	0.259	0.295	-0.237	0.781
Master	M. Phil.	0.092	0.160	0.567	-0.223	0.407
	Ph. D.	0.282	0.232	0.225	-0.174	0.737
M. Phil.	Ph. D.	0.190	0.274	0.489	-0.349	0.729

Note: Field Survey, 2024

Table 7 elaborates the post-hoc analysis and evidences indicates that degree of making irrational investment decisions among academic qualification of bachelor, master, M. Phil, and PhD are not statistically significant means that they have similar nature of conducting irrational investment decisions.

3.5 Profession and Investment Decision

One way ANOVA analysis of investment decision to the profession of the respondents was conducted and results show that there is no significant difference [F (3, 394) = 0.842, p value = 0.432] in investment decision among the profession. Furthermore, the post-hoc LSD test was conducted to examine the differences of the investment decisions within the group of the profession. The detailed of ANOVA of investment decision as per profession is documented into Table 8.

Table 8

ANOVA Analysis of Investment Decision among Profession

Groups	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.388	2	0.694	0.842	**0.432**
Within Groups	407.118	494	0.824		
Total	**408.505**	**496**			

Note: Field Survey, 2024

Table 8 displays the result of ANOVA test of investment decisions as per respondents' profession and found that investment decisions as profession is not differed significantly. However, the post-hoc LSD is also utilized to examine any difference with in the group of profession. The detailed of the post-hoc LSD result of investment decisions as per profession is documented into Table 9.

Table 9

LSD Analysis of Investment Decision among Profession

Profession	Profession	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					LB	UB
Mgmt. Faculty	Chartered Accountant	-0.132	0.105	0.207	-0.338	0.073
	Investment Comp.	0.002	0.116	0.985	-0.225	0.230
CA	Investment Comp.	0.135	0.139	0.333	-0.138	0.407

Note: Field Survey, 2024

Table 9 explains the post-hoc analysis of investment decision as per profession and evidences indicate that degree of making irrational investment decisions among management faculty, chartered accountant and staff from investment companies is not significantly different. Hence, the degree of investment irrationality among them is not significantly different.

Finally, investment decisions of the individuals are differed as per demographic characteristics especially gender and marital status and finding is consistent with the finding of (Lan et al., 2018; Saivasan & Lokhande, 2022).) due to individuals are different as well as their behaviour, activities, decision-making procedures, and level of thinking is quite unique. Additionally, Quang et al. (2023) found that level of education, over or underreaction, gender and age of the investors significantly influence investment decisions. Similarly, Nguyen and Schuessler (2012) found that investment behaviour is differed based on demographic characteristics. However, this finding is contradicted with the finding of (Geetha & Ramesh, 2012) due to demographic factors are not only the critical factors for investment decisions.

4. CONCLUSION AND IMPLICATIONS

This study examines the differences in investment decisions as per demographic characteristics. This study concluded that equity investment decision is differed as per demographic characteristics of the respondents. This finding highlights that investment behaviour or investment decisions are uniform across the population and it varies according to personal and demographic backgrounds. This result indicates that difference in gender, age group, marital status, academic qualification, and income level investors have difference risk taking capacity, information processing capacity, difference in investment preferences, preferences for safer investment options, and different diversification capacity.

Considering these variations in investment decisions is pivotal for final advisors, policy makers, and instructors focusing to develop financial literacy programs, individual investment strategies, and facilitate and inspire for involvement in financial markets across diverse groups. Moreover, future research could further explore the investment decisions as per diverse demographic characteristics in wide area coverage including other groups of investors.

References

Al-Tamimi, H. A. H., & Kalli, A. A. (2009). Financial literacy and investment decisions of UAE investors. *The Journal of Risk Finance*, *10*(5), 500–516. https://doi.org/10.1108/15265940911001402

Beckmann, E. (2013). *Financial literacy and household savings in Romania.* (OECD Working Papers on Finance, Insurance and Private Pensions, No. 19). OECD Publishing. https://doi.org/10.1787/5k4dd1zlrnlc-en

Cochran, W. G. (1977). *Sampling Techniques*. 3rd ed. Wiley Publication

Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, *25*(2), 383–417. https://doi.org/10.2307/2325486

Geetha, N., & Ramesh, M. (2012). A study on relevance of demographic factors in investment decisions. *Perspectives of Innovations, Economics, and Business*, *10*(1), 14-27.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.

Lan, Q., Xiong, Q., He, L., & Ma, C. (2018). Individual investment decision behaviors based on demographic characteristics: Case from China. *PloS one*, *13*(8), 1-16. https://doi.org/10.1371/journal.pone.0201916

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Nguyen, T., & Schuessler, A. (2012). Investment decisions and socio-demographic characteristics–empirical evidence from Germany. *International Journal of Economics and Finance*, *4*(9), 1-12. http://dx.doi.org/10.5539/ijef.v4n9p1

OECD. (2020). *OECD/INFE 2020 International Survey of Adult Financial Literacy*. OECD Publishing.

Pompian, M. M. (2012). *Behavioral finance and wealth management: how to build investment strategies that account for investor biases*. John Wiley & Sons.

Quang, L. T., Linh, N. D., Van Nguyen, D., & Khoa, D. D. (2023). Behavioral factors influencing individual investors' decision making in Vietnam market. *Journal of Eastern European and Central Asian Research (JEECAR)*, *10*(2), 264-280. https://doi.org/10.15549/jeecar.v10i2.1032

Ritter, J. R. (2003). Behavioral finance. *Pacific-Basin Finance Journal*, *11*(4), 429–437. https://doi.org/10.1016/S0927-538X(03)00048-9

Sahu, T. N., & Rajasekar, D. (2017). Influence of demographic factors on investment preferences of individual investors: A study in Odisha. *International Journal of Research in Finance and Marketing*, 7(3), 1–12.

Saivasan, R., & Lokhande, M. (2022). Influence of risk propensity, behavioural biases and demographic factors on equity investors' risk perception. *Asian Journal of Economics and Banking*, *6*(3), 373-403. https://doi.org/10.1108/AJEB-06-2021-0074

Sapkota, M. P. (2022). Behavioural finance and stock investment decisions. *Saptagandaki Journal*, *13*(1), 70-84. https://doi.org/10.3126/sj.v13i1.54947

Sapkota, M. P., & Bhandari, S. (2022). Cognitive bias and stock investment decisions among the individual investors. *Journal of Business and Social Sciences*, *4*(1), 61-73. https://doi.org/10.3126/jbss.v4i1.71135

Sapkota, M. P., & Bhandari, S. (2023). Social Biases and Equity Investment Decisions of Individual Investors: Behavior Finance Perspective. *BMC Journal of Scientific Research*, *6*(1), 82-96. https://doi.org/10.3126/bmcjsr.v6i1.60957

Sapkota, M. P., & Chalise, D. R. (2023). Investors' behavior and equity investment decision: an evidence from Nepal. *Binus Business Review*, *14*(2), 209-221. https://doi.org/10.21512/bbr.v14i2.9575

Thaler, R. H. (1987). Anomalies: The January effect. *The Journal of Economic Perspectives*, *1*(1), 197–201. https://doi.org/10.1257/jep.1.1.197

Thaler, R. H. (1999). The end of behavioral finance. *Financial Analysts Journal*, *55*(6), 12–17. https://doi.org/10.2469/faj.v55.n6.2310