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Impact of Qualification of individual retail investors on the Fundamental analysis aspect of Investment decision making-An empirical investigation.

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Abstract

Objective: The objective of this study is to find out the Impact of qualification on Fundamental analysis aspect of Investment decision of the individual retail investors of Guwahati, Assam, India.

Design/Methodology/Approach: The tested independent variables are different levels of qualification and the dependent variable is fundamental analysis aspect of investment decision making. Ordinal logistic regression is used to find the impact of these levels of qualification on the investment decision.

Findings: Qualification level 1,2 and 3 i.e., up to graduate level, post graduate level and post graduate and above level of qualification has significant impact on the fundamental analysis aspect of investment decision making. This study showed that more factors can be used as separate variables to figure out how an investment decision is affected. Classifying people based on their qualification level alone is not enough to figure out how they choose investments.

Key words: *Qualification level, Fundamental analysis, Investment decision*

JEL Classification: G11

Introduction

The area of finance has been dominated by conventional models since the 1950s. The rationality of people is a cornerstone of conventional economics. The core financial theories rest on the assumption of investor rationality, which allows bond and stock markets to function efficiently.

Miller and Modigliani, William Sharpe's Capital Assets Pricing Model (CAPM), Scholes, Linter, Black and Merton, and Markowitz's Portfolio Principles form the basis of what is known as "standard finance" (Statman, 1999). The standard view of finance is that investors act in their own self-interest when making investment choices. This assumption is what makes the idea of market rationality possible. According to Jensen and Merckling, the "rational man," a person quite different from the individual, is at the core of traditional finance theory (Jensen and Merckling, 1994).

Decision making

Traditional economics assumes that the decision maker is a rational, self-interested investor who is fully informed about the market and whose goal is to maximise his personal utility given the available options and limitations. The term "Homo-Economicus" (Persky, 1985) is used to describe this outlook. Although classical theorists have segmented the decision-making process into four stages, the order in which they occur is not fixed. Here are a few of them, as outlined by Doya (2008): Accept the present situation or circumstances. Second, think about the rewards or consequences that could come from making each choice. Third, every person acts out of a sense of self-interest. Depending on the outcome, the person may rethink their decision to take action. Individual decision-makers are assumed to have access to all available knowledge about the market that is useful for making decisions. The reality is that no one can foresee every possible event with 100% confidence.

When making a decision, there is often a lack of comprehensive or accurate information. The economics of uncertainty and the economics of information are generally used while making such choices. The decision maker recognises his ignorance but nevertheless works hard to make the right choice. According to the economics of information, consumers seek for more data before committing to a course of action (Gilboa, 2010). This shows that although the economics of knowledge explores how to best prepare for choices, the economics of uncertainty instead focuses on the decisions themselves (Ackert & Deaves, 2009).

Qualification of retail investors

There is evidence that an investor's degree of education influences his or her level of confidence in making investment choices, and Fachrudin K.R. and Fachrudin K.A. (2016) state that investor education is a very important element having a substantial effect on the decision making of the investors. Investors with higher levels of education traded more often than those with lower levels of education, according to research by Liivamagi (2016). Tonn Talpsepp, Kristan Liivamagi, and Tarvo Vaarmets (2020) found that the ability to regulate investment and relative efficiency was influenced by factors like trading style, profitability, experience, and level of education.

Fundamental Analysis

From a financial statement analysis perspective, the goal of this study, as stated by Penman (1992), is to identify "what information projects future earnings." The need and usefulness of financial statements are shown by the demonstration of the value relevance of these non-earnings accounting indicators, notwithstanding the untimeliness of the current profits number. Fundamental analysis, which considers both the company's internal and external contexts, has been deemed the most trustworthy approach for predicting the direction of stock prices by several researchers, including Tsai and Hsiao (2010), Anbalagan and Maheswari (2015), Ghaznavi et al. (2016), and Agarwal et al. (2017). Since most of the components in a fundamental analysis are not well-structured, automating it is challenging. Recent advances in machine learning, however, have made it possible to automate stock market prediction using unstructured data, resulting in promises of increased forecast accuracy. Although adequate for predicting long-term stock-price movement (Khan et al. 2011), fundamental analysis is inappropriate for predicting short-term stock-price movement.

Gaps in existing literature

Reviewing the literature for this study yielded studies on impact of educational qualification on investment decision as a whole but I was unable to locate any Assam- or Northeast India based empirical research on the impact of qualification of individual retail investors on the Fundamental analysis aspect of investment decision making. Hence this study is carried out to fulfil this gap.

Statement of the problem

Evidence from research conducted outside of India shows that retail investors in the stock market are impacted by their level of education while making investing choices. It is yet to be determined and established in the case of Assam and other regions of Northeast India whether or not the educational qualification of individual retail investors impact the Fundamental analytical element of investment choices.

Research question

a. Is there any impact of level of education of individual retail investors on the fundamental analysis aspect of investment decision making?

Objective of the study

To find out the impact of qualification of individual retail investors on the fundamental analysis aspect of investment decision:

Hypotheses

H_{01}- Qualification of individual retail investors have no impact on the fundamental analysis aspect of investment decision.

Significance of the study

Investors in Assam would benefit from this research since it would provide light on the role that level of education of retail investors may play in the fundamental analysis phase of their investing decision-making process. Their investing strategies would benefit greatly from this new insight. Researchers would have a solid foundational study from which to build their work. A strong understanding of the impact of qualification of investors on the fundamental analysis aspect of decision making of Assam's investors may be constructed using empirical data.

Methodology

The survey technique is used to gather data by using a questionnaire using a five-point Likert scale. The questionnaire is built utilising questions from Neelakantan (2015), who used the structural equation model (SEM) technique to establish a relevant model for investor behaviour. Responses are gathered using a simple random sampling procedure. Martin and Polivka (1995) employed pilot testing to evaluate the questionnaire on a small sample of respondents in order to detect and remove any difficulties. The pilot test respondents were identical to those who participated in the second survey, i.e., they were recruited from the same demography. Cronbach's alpha is employed for factor reliability in the current research. Cronbach's alpha is a measure of internal consistency, or how closely linked a collection of things is. Cronbach's Alpha values of 0.70 or above are regarded as consistent and dependable (Nunnaly, 1978). In this research, the Ordinal Scale is employed.

Scales were evaluated using Cronbach's Alpha (a measure of internal consistency) after the pilot survey. The Cronbach's Alpha value obtained after the test is 0.7036, which is within the acceptable range. Questionnaires were issued to 430 stock investors in Guwahati, with 391 viable replies included for this research. The timeframe for data collection is February 2022 till January 2023.The data is analysed using Ordinal Logistic Regression Analysis. The same has been interpreted, and the findings have been discussed.

Table 1: Descriptives

		N	Marginal Percentage
My investment decision is based on fundamental analysis of firms	Low agreement	4	1.0%
	agreement	66	16.9%
	High Agreement	248	63.4%
	Very high agreement	73	18.7%
QUALIFICATION OF RESPONDENTS	UPTO GRADUATE	129	33.0%
	POST GRADUATE	218	55.8%
	POST GRADUATE AND ABOVE	31	7.9%
	OTHERS/PROFESSIONALS	13	3.3%
Valid		391	100.0%
Missing		0	

Total	391	

Source: SPSS(Authors)

Data Interpretation and Analysis

Table 2: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	52.811			
Final	43.926	8.885	3	.031

Link function: Logit.

Source: SPSS(Authors)

Null Hypothesis: There is no significant difference between baseline model and final model.

Interpretation: The significant value is '0.031', which is less than '0.05', hence we cannot accept the null hypothesis. Hence, we can say that there is a significant difference between baseline model and final model.

Table 3: Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	7.419	6	.284
Deviance	8.229	6	.222

Link function: Logit.

Source: SPSS(Authors)

Null Hypothesis: The observed data is having goodness of fit with the fitted data.

Interpretation: The significant value is '0.284', which is greater than '0.05', hence we accept the null hypothesis. Hence, we can say that the observed data is having goodness of fit with the fitted data.

Table 4: Pseudo R-Square

Cox and Snell	.022
Nagelkerke	.026
McFadden	.012

Link function: Logit.

Source: SPSS(Authors)

Interpretation: It indicates the proportion of the variance explained by the independent variables on the dependent variables in regression model. The Nagelkerke value lies between 0 and 1. The Nagelkerke value is '0.026', which signifies that the independent variables are not able to impact the dependent variable adequately. i.e., qualification of retail investors is not able to impact fundamental analysis aspect of investment

decision making of investors adequately. Hence, addition of more variables is required to make the model more adequate.

Table 5: Parameter Estimates

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[My investment decision is based on fundamental analysis of firms = 2]	-3.317	.708	21.931	1	.000	-4.706	-1.929
	[My investment decision is based on fundamental analysis of firms = 3]	-.241	.536	.202	1	.653	-1.292	.810
	[My investment decision is based on fundamental analysis of firms = 4]	2.806	.556	25.491	1	.000	1.717	3.895
Location	[QUALIFICATION=1]	1.225	.568	4.652	1	.031	.112	2.338
	[QUALIFICATION=2]	1.347	.557	5.840	1	.016	.255	2.439
	[QUALIFICATION=3]	1.910	.653	8.559	1	.003	.631	3.190
	[QUALIFICATION=4]	0[a]	.	.	0	.	.	.

Link function: Logit.

a. This parameter is set to zero because it is redundant.

Source: SPSS(Authors)

Interpretation:

2. The significant value for agreement level 2 of fundamental analysis aspect of investment decision making is ‘0.000’ which showcases that it is a significant agreement level for fundamental aspect of investment decision making.
3. The significant value for agreement level 4 of fundamental analysis aspect of investment decision making is ‘0.000’ which showcases that it is a significant level.

4. The significant value for qualification level 1 i.e., up to graduate is '0.031', which showcases that this level of qualification has significant impact on the fundamental analysis aspect of investment decision making.
5. The significant value for qualification level 2 i.e., post graduate is '0.016' which showcases that this level of qualification has significant impact on the fundamental analysis aspect of investment decision making.
6. The significant value for qualification level 3 i.e., post graduate and above is '0.003' which showcases that this level of qualification has significant impact on the fundamental analysis aspect of investment decision making.

Table 6: Test of Parallel Lines[a]

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	43.926			
General	35.697	8.229	6	.222

a. Link function: Logit.

Source: SPSS(Authors)

Null Hypothesis: The location parameters are the same across response categories.

Interpretation: If the significant value is less than '0.05', we cannot accept the null hypothesis, since the significant value is '0.222' which is greater than '0.05' we accept the null hypothesis. i.e., location parameters are the same across response categories.

Results and discussion

Table 2 on Model fitting information shows that the significant value is '0.031', which showcases that there is a significant difference between baseline model and final model. Table 3 on Goodness-of-fit shows that the significant value is '0.284', which showcases that the observed data is having goodness of fit with the fitted data. Table 4 on Pseudo-R-Square shows that the Nagelkerke value is '0.026', which signifies that addition of more variables is required to make the model more adequate. Table 5 on Parameter estimates showcases that the qualification of individual retail investors impact the fundamental aspect of investment decision significantly. Table 6 on test of parallel lines showcases that the location parameter is the same across response categories.

Limitation and future implications

The limitation of this study is its scope i.e., only the individual retail investors of Guwahati were considered for the study. Again, only the retail investors were included in this analysis, however institutional investors like broker firms, banks and security firms may also be considered in future studies. The inherent ambiguity of human psyche and situational nature of response by respondents may impact the consistency of the response when collected through the Likert scale questions. The impact of qualification of individual retail investors on

the fundamental analysis carried out by the retail investors would start a new front of discussion among the researchers and this would surely add to the present knowledge on the impact of demographic factors on the investment decisions of individual retail investors.

Conclusion

The qualification of individual retail investors has significant impact on the fundamental analysis aspect of investment decision making of retail investors of Guwahati. Addition of more variables is required to find the adequate impact on the fundamental analysis aspect of investment decision making. The variables like other demographic factors, cultural diversity, economic issues etc. may expand the scope of this study.

Author contribution

Author has accepted responsibility for the entire content of this manuscript and approved its submission.

Declaration of Conflicting interests

The author declared no potential conflict of interests with respect to the research, authorship and publication of this article.

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References

Ackert, Lucy & Deaves, Richard. (2009). Behavioral Finance: Psychology, Decision-Making, and Markets

Agarwal P et.al (2017) Stock market price trend forecasting using machine learning. Int J Res Appl Sci Eng Technol: IJRASET 5(IV):1673–1676

Anbalagan, T & Maheswari,Uma. (2015). Classification and Prediction of Stock Market Index Based on Fuzzy Metagraph. Procedia Computer Science. 47. 214-221. 10.1016/j.procs.2015.03.200.

Doya, K. (2008). Modulators of decision making. Nat Neurosci 11, 410–416. retrieved from https://doi.org/10.1038/nn2077 on 25th of April, 2023

Fachrudin, K.R. and Fachrudin, K.A. (2016) The Influence of Education and Experience toward Investment Decision with Moderated by Financial Literacy. Polish Journal of Management Studies, 14, 51-60. https://doi.org/10.17512/pjms.2016.14.2.05

Ghaznavi A., Aliyari M. & Mohammadi R. (2016) Predicting stock price changes of tehran artmis company using radial basis function neural networks. Int Res J Appl Basic Sci 10(8):972–978

Gilboa, Itzhak. (2010). Rational Choice

Jensen, Michael C., and William H. Merckling (1994). The nature of man. Journal of Applied Corporate Finance 7:2, 4–19

Khan, HZ., Alin, ST. & Hussain, A. (2011). Price prediction of share market using artificial neural network "ANN". Int J Comput Appl 22(2):42–47. https://doi.org/10.5120/2552-3497

Liivamägi, K. (2016). Investor education and trading activity on the. Baltic Journal of Economics.

Martin, E., & Polivka, A.E. (1995). Diagnostics for redesigning survey questionnaires measuring work in the current population survey. *Public Opinion Quarterly, 59,* 547-567.

Neelakantan.P.R. (2015). "behavioral finance-a special study on investor psychology". Kanchipuram: SCSVMV University

Nunnaly,J.C.(1978).Psychometric theory(2nd ed.). New York: McGraw-Hill.

Penman, S. H. (1992). Return to Fundamentals. Journal of Accounting, Auditing & Finance, *7*(4), 465–483. https://doi.org/10.1177/0148558X9200700403

Persky, Joseph. 1995. "The Ethology of Homo Economicus." *Journal of Economic Perspectives*, 9 (2): 221-231.DOI: 10.1257/jep.9.2.221

Statman Meir (1999). Behavioural Finance: Past Battles and Future Engagements. Financial Analyst Journal, (Nov-Dec 1999) 55:6, 18-27

Tõnn Talpsepp, K. L. (2020). Academic abilities, education and performance in the stock market. Journal of Banking & Finance.

Tsai, C., & Hsiao, Y. (2010). Combining multiple feature selection methods for stock prediction: Union, intersection, and multi-intersection approaches. *Decis. Support Syst., 50,* 258-269.