

Commerce Graduates In Indian Stock Market: A Comparative Study Of Investors And Non-Investors

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Abstract

In today's age people are competitive of being successful in life. This is more of wealth creation which requires a lot more of the theoretical and analytical skills. Commerce graduates who have acquired higher degrees will have enough and thorough knowledge of theories and utilities of its application. These can be very effectively and efficiently be incorporated in their spending and investment habits. But the existing literatures prove that there is large difference between knowledge and application of knowledge in investment management skills. Therefore, an attempt has been made to identify the factors inhibiting the highly qualified commerce graduates from participating in the stock market in India. The data for the study is constituted mainly from primary data; collected using structured questionnaire. Factor Analysis and Logistic Regression have been used for analysing the collected data. The financial hindrances, personal constraints, and attitudinal constraints are all factors that prevent highly qualified graduates from investing in the stock market, according to the study's findings. Attitudinal hindrances were determined to have the greatest impact as a reason for lesser engagement among the factors identified. The paper suggest that application of experimental learning must be made to practice by implementing the necessary changes in existing higher education curriculum as it brings the confidence to apply it in real life scenario. Also the application of theoretical knowledge must be made a strong factor for measuring the financial literacy.

Keywords: lower participation, highly qualified Commerce graduates, non-investors, reasons, stock investors

Introduction

The average Indian household has 84 percent of its wealth in real estate and other tangible assets, 11% in gold, and the remaining 5% in financial assets. Households in advanced economies have significantly greater financial assets than their Indian counterparts, are much more likely to use a mortgage to finance home purchases and devote a significant portion of their wealth to retirement savings over their career. Furthermore, during the course of their lives, households in these economies devote a significant portion of their wealth to retirement savings; for example, retirement assets make for quite big amounts of wealth in Australia (23 percent) and the United Kingdom (24 percent) (*INDIAN HOUSEHOLD FINANCE*, 2017). Participation in the stock market is a significant economic result. Not participating in the stock market can result in a significant loss of welfare, as exposure to equities, and hence to the equity premium, can be a significant predictor of the long-run return on individual savings(Cocco et al., 2005).

Investors avoid the stock market because they are unfamiliar with stocks, the stock market's operation, and asset pricing(M. van Rooij et al., 2011). Apart from that, those who have already invested in the stock market are not well acquainted in the stock market's approach, but they are nevertheless functional in their own ways. Even though numerous factors are linked to participation, financial literacy is the most essential aspect in investors' decision-making. Few available research on financial literacy in India reveal that financial illiteracy is pervasive, and that even regular stock market participants lack comprehension of even the most basic economic principles. Investors' attitudes frequently determine the environment of financial literacy for them. Low levels of financial literacy are troublesome in a competitive market because they limit the financial well-being process. This will have obvious consequences for both individuals and society as a whole(Mate, 2017).

Review of literature

A nationwide baseline study on Financial Literacy and Inclusion in India was undertaken by the National Center for Financial Education in 2014. It has been shown that 25% of India's urban population and 15% of its rural population are financially literate. And, in comparison to the rest of the population, graduates had a higher level of financial literacy. It underlines the importance of education in the development of financial literacy. Literacy, knowledge, and caring behaviour and attitude all improve as education levels rise (*Financial Literacy and Inclusion in India*, 2014).

Financial literacy is important for an individual's financial development. To back up this claim, there is a wealth of evidence that demonstrates the interconnection between financial literacy, financial habits, and their effects. There is a positive association between financial literacy and retirement planning, saving, and asset building (Ameriks et al., 2003; M. C. J. van Rooij et al., 2012). According to Hilgert & Jeanne M. Hogarth, (2003), there is a strong link between financial knowledge and the likelihood of engaging in various financial practises such as tracking expenses, paying bills on time, making budgets, regular credit card bill payment, saving, having emergency funds on hand in case of emergency, making diversified investments, and setting financial goals.

Other research in this field focuses on an individual's numerical ability and its outcome. These characteristics are linked to a high level of financial knowledge. Individuals with stronger overall cognitive abilities or who are skilled with numbers have higher degrees of financial literacy, according to Banks & Oldfield, (2007). Individuals who willingly enrol in financial education programmes are more future-oriented, according to Meier & Sprenger, (2010). Other influences on the association between financial education and behaviour include familial background (Cunha & Heckman, 2007; May et al., 2010), and personality (Infante & Weissbach, 1990).

According to a poll done by the National Centre for Financial Education on Financial Literacy and Inclusion in India (2014), the Indian population is aware of, holding, and operating in the stock market. It reveals that only 33% of the public is aware of shares and stocks, and just 3% of the population owns them. However, just 2% of the population is active. When comparing the above data to those from the rest of the globe, an Indian

stock market participant is on the lower end. It's both shocking and unexpected.

A Student Managed Fund's goal is to enrich student education by allowing them to actively participate in financial markets. Students help in the stock selection and maintenance of a real portfolio, gaining practical expertise with money management. They learn how to deal with the uncertainty that comes with predicting stock value and comparing it to stock price. As it relates to financial decisions, the approach aids students in developing their intuition and animal spirits (Neely et al., 2014).

Payne & Tanner, (2017) suggest that a financial technology course be included in the undergraduate finance curriculum at business schools. Increases in the availability and cost of financial data and technology have revolutionised the way businesses are conducted during the last decade. As a result, graduates who excel at technological applications will have a distinct advantage in terms of job placement and future success. Business schools, on the other hand, have been reluctant to adjust to this change. Despite the fact that many finance courses include spreadsheet analysis as part of the content, we found that only about 1% of AACSB certified business schools provide a specialist course in financial technology applications.

Research methodology

Objectives

To determine the reasons that inhibit commerce graduates from engaging in the Indian stock market and the relative importance of these factors in influencing stock market involvement among commerce graduates.

Rationale of the study

Despite the fact that there is a large body of literature on the issues that qualified individuals confront when making investments, none of them has sought to investigate all in detail. Understanding the reasons behind reduced stock market engagement of commerce graduates is necessary in order to devise effective policy interventions that promote proper participation of specialists in the stock market, resulting in increased economic participation.

Sample of the study

Population of the study comprised of investors and non-investors who are graduates in commerce in

India working in and belonging to Kerala. The present study draws its sample from the working commerce graduates in Kerala as financially independent who are more likely to participate in investment activities. For selecting the sample, judgment-cum-snowball sampling technique was used. The information regarding the dealing of graduated stock investors with the stock brokers was obtained by personally contacting the various stock brokers. Due to time and cost constraints, a sample of 200 commerce graduated stock investors was selected. The list was prepared with the help of personal contacts. Thereafter, sample of 200 women non-stock investors were chosen. The survey was conducted during January to March 2022.

Findings and discussions

An attempt was made to incorporate the responses from commerce graduates belonging to different backgrounds in terms of age, marital status, occupation and monthly income. Table 1 exhibits the demographic profile of the sampled respondents. The first part of the table shows the demographic profile of stock investors while the second part of the table focuses on the demographic profile of non-stock investors. The table shows that the majority of the graduate stock investors (42%) belonged to the age group between 30 and 40 years, followed by 40 percent of the respondents belonging to the age group of less than 30 years. The next group of stock investors was those in their 40s and 50s (12 percent). Stock investors aged 50–60 years made up 5.5 percent of the sample, while those aged beyond 60 years made up only 0.5 percent. In terms of marital status, 76.5 percent of stock investors in the sample were married, while 20.5 percent were single, 2% were divorced, and the remaining 1% were widowed. In terms of respondent occupation, the data shows that the bulk of stock investors (45.5 percent) are in the service industry, followed by self-employed (39.5 percent). Professionals accounted for 15% of the sample. Table 1 also

shows the education level of the sampled respondents. It brings out that 49.5 percent of the respondents were graduates followed by graduates (49%) and only 1.5 percent of the respondents had a doctoral degree. The income categorization shows that 42.5 percent of the stock investors belonged to the personal monthly income category of less than Rs. 40,000 followed by 24 percent belonging to the income category of Rs. 40,000–60,000. Only 9.5 percent of the stock investors were of the income category of Rs. 60,000–80,000 while 24 percent of the belonged to the income category of above Rs.80,000. As far as the demographic profile of non-stock investors is concerned, the table exhibits that the majority of women non-stock investors (55.5%) belonged to the age group of less than 30 years followed by 27.5 percent respondents belonging to the age group between 30 and 40 years. The next category of non-stock investors was of the age group of 40–50 years (11.5%). The respondents falling in the age category of 50–60 years were 4.0 percent, while those falling in the age category of above 60 years formed just 1.5 percent of the sample. With regard to the marital status most of the respondents, that is, 59 percent respondents in the sample were married while 37.5 percent of them were single, 2.5 percent were divorced and the rest 1 percent were widowed. As far as non-stock investor's occupation is concerned, the table shows that the majority of the respondents belong to service category (58%), followed by business /self-employed. Table 1 also shows the education level of the sampled population. It highlights that 78.5 percent of non-stock investors were post graduates followed by graduates (21.0%) and a doctoral degree. The income categorization brings out that 44 percent of non-stock investors belonged to the personal monthly income category of less than Rs.40,000 followed by 31.5 percent belonging to the income category of Rs.40,000–Rs.60,000. Only 14 percent of the respondents were of the income category of Rs.60,000–Rs.80,000 while 10.5 percent belonged to the income category of above Rs.80,000.

Table 1: Demographic profile of respondents

	Demographic Variables	Stock Investors No. of Respondents (%)	Non-stock Investors No. of Respondents (%)
Age	Less than 30	80 (40.0)	111 (55.5)
	30–40	84 (42.0)	55 (27.5)
	40–50	24 (12.0)	23 (11.5)
	50–60	11 (5.5)	8 (4.0)
	Above 60	1 (0.5)	3 (1.5)
	Total	200(100)	200 (100)
Marital Status	Married	153 (76.5)	118 (59)
	Single	41 (20.5)	75 (37.5)
	Divorcee	4 (2.0)	5 (2.5)

	Widow	2 (1)	2 (1)
	Total	200 (100)	200 (100)
Education	Graduation	99(49.5)	42(21)
	Post -graduation	98(49)	157(78.5)
	Any other	3(1.5)	1(0.5)
	Total	200(100)	200(100)
Occupation	Businesswoman/self employed	79 (39.5)	30 (15)
	Professional	30 (15)	54 (27)
	Service	91 (45.5)	116 (58)
	Total	200 (100)	200 (100)
Personal monthly income (Rs)	Less than 40,000	85 (42.5)	88 (44.0)
	40,000–60,000	48 (24.0)	63 (31.5)
	60,000–80,000	19 (9.5)	28 (14.0)
	More than Rs 80,000	48 (24.0)	21(10.5)
	Total	200 (100)	200 (100)

Source: Calculated data

Exploratory factor analysis has been performed, in order to bring out the reasons that inhibit commerce graduates from participating in the stock market. The appropriateness of factor analysis is to be determined before the application. to serve the purpose, the suitability was measured using a correlation matrix, Kaiser-Meyer-Okin (KMO). The matrix proved that there existed adequate correlation among the variables supporting to factor analysis. KMO measure of sample adequacy was found to be 0.958. This value of KMO is greater than the recommended value of 0.60 (Kaiser, 1974) thereby indicating that the data are fit for the purpose of running factor analysis. After ensuring that the data was suitable for factor analysis, principal component analysis was performed to uncover the factors that prevent commerce graduates from investing in the stock market. When it comes to data reduction, the principal components analysis method is chosen since it evaluates the whole variance and derives factors that contain even minor proportions of distinct variances (Hair, Black, Babin, & Anderson, 2010). The Varimax rotation method was used to rotate the initial factor solution in principal component analysis. When the data was subjected to factor analysis, 22 assertions were reduced to six factors, which accounted for 66.522 percent of the variation.

Financial Hindrances (F1)

Table 2 demonstrates that the first and most crucial component, "financial hindrances," is comprised of five assertions. With an Eigen value of 6.440, it explained 14.287 percent of the total variance of the data. The factor included five statements: "Lack of financial control prevents me from investing in the stock market (0.800)," "Lack of disposable income prevents me from investing in the stock market (0.782)," "Not much financial resources are left over as there are other financial

priorities to be met (0.762)," "To save for future uncertainties is the reason that prevents me from blocking my money in the stock market (0.710)," and "Lack of capital is a great hindrance to investing in the stock market (0.651).

Attitudinal Constraints (F2)

With an Eigen value of 2.399, the second dimension, "attitudinal restrictions," explained 13.746 percent of the total variance. It contains five statements, including "I am hesitant to use acquired theoretical knowledge due to less knowledge on application, which limits my participation in the stock market"(0.800), "My practical knowledge is very low, which prevents me from making investments"(0.746)", "I am hesitant to interact with professionals while making stock market transactions since I am also from similar background"(0.743),"My risk-averse attitude prevents me from undertaking high-risk investments (0.699)," and "Lack of interest in financial matters is a key reason for not investing in the stock market(0.626)." These words disguise the flaws that graduates perceive in themselves and hinder them from taking on the responsibility of investing.

Infrastructural Issues (F3)

Three statements make up the third dimension, "infrastructural difficulties." "The lack of quickly assimilable information is a cause for lower participation (0.810)," "The lack of an efficient grievances handling system lowers my participation in the stock market (0.790)," and "The cumbersome procedure and formalities of the stock market prevent me from making investment (0.763)," are among the statements included in the factor. This factor accounts for 9.899 percent of total variance and has an Eigen value of 1.405. This

element brings to light the issues that are unique to the stock market.

Family concern (F4)

With an Eigen value of 2.191, the third component, "family duties," explained 10.629 percent of the overall variation. It includes three items: "I have a tendency to shirk additional work owing to family responsibilities (0.855)," "It is difficult for me to engage in the stock market due to family limits (0.824)," and "I am unable to actively participate in the stock market due to a lack of time (0.817)."

Binary Logistic Regression

When there are only two categories of dependent variables, logistic regression is typically employed to discriminate between two or more groups. Binary logistic regression is used when the dependent variable is dichotomous, such as investing in the stock market (stock investors vs. non-investors). The logit model, which is developed from the logistic regression process, calculates the relative likelihood of an event occurring (using the -2 log likelihood measure) as well as the model's goodness of fit. As a result, the

-2 log likelihood measure was used to examine the statistical significance of the logit model that was created to discover the causes that prevent commerce graduates from participating in the stock market. Non-stock investors were assigned a code of "1," whereas stock investors were assigned a code of "0." The model's goodness of fit was assessed using the Nagelkerke R2 statistic, which showed a relatively strong link between the dependent and independent variables with values of 0.363

With a p value of 0.104, Hosmer and Lemeshow's value was found to be negligible, indicating that there is no significant difference between model predictions and observed values. The -2 log likelihood function was found to be 367.480, and chi-square tests were used to see if there was a significant reduction (164.8187). As indicated in Table 2, this test also revealed that the model is a significant good fit. The logit model, which predicts the factors that prevent or encourage graduates from engaging in the stock market, is shown below.

$$\text{Logit} = -0.044 + 0.747 (\text{Attitudinal Hindrances}) + 0.377 (\text{Financial Constraints}) + 0.119 (\text{Infrastructural Problems}) - 0.261 (\text{Family Obligations})$$

Table 2: Goodness of fit measures

-2 Log likelihood	367.40		
Nagelkerke R-square	0.363		
Hosmer and Lemeshow test	Chi-square	df	Sig.
	13.164	8	0.106

Source: Calculated values

Table 3 demonstrates that the dependent variable is negatively influenced by the variable family duties. To put it another way, graduates believe that their families encourage them to participate in investment activities rather than discouraging them from doing so. In terms of infrastructure issues, they were discovered to have a negligible impact on graduates' participation in the stock market. It's also worth noting that, because Wald's statistic is the highest in this situation, attitudinal

hindrance have the greatest impact as a factor for decreased stock market involvement among graduates. While all other factors restrict graduates from investing in the stock market, the value of the B coefficient of the variable family duties is negative, indicating that family tends to encourage them to do so. Since the information was gathered from working graduates in Kerala, they believe that their families support them in all of their attempts.

Table 3

	B	SE	Wald	df	Sig.	Exp (B)
Attitudinal constraints	0.747	0.149	25.047	1	0.000***	2.111
Infrastructural problems	0.119	0.153	0.607	1	0.436	1.127
Financial hindrances	0.377	0.151	6.206	1	0.013**	1.458
Family obligations	-0.261	0.153	2.936	1	0.087	0.770
Constant	-0.044	0.128	0.116	1	0.733	0.957

Source: Calculated values

Conclusion

In fact, the majority of individuals consider investing to be a "intellectual" activity. The poor participation of commerce graduates in investment operations is due to a variety of causes. Knowledge of the obstacles that prevent people from investing in the stock market will aid policymakers in developing economic development plans. As a result, the purpose of this study was to determine the characteristics that prevent commerce graduates from investing in the stock market in India, as well as the proportional importance of these factors in determining commerce graduates' stock market involvement.

Financial restrictions, personal constraints, and attitudinal constraints are all factors that prevent commerce graduates from investing in the stock market, according to the study's findings. On the other hand, they believe that family encourages them to participate in investing activities rather than discouraging them from doing so. Similarly, infrastructure issues were found to have a negligible impact on stock market involvement. Among the identified issues, attitudinal restrictions were determined to have the greatest impact as an explanation for reduced participation of commerce graduates.

Suggestions

According to the study, policymakers should establish programmes for the experimental learning system in the commerce stream since attitudinal constraints are a barrier. To invest in the stock market, financial service providers should be given advanced level knowledge. Because commerce graduates are more likely than other graduates to seek investment advice, an investment advisor can play an important role in providing women with financial solutions to fit their needs. The study also implies that non-investors' investment behaviour and attitudes toward financial investments need to improve. Investor education programmes must be made available in order to achieve this.

Self-education gained through reading financial magazines/newspapers, watching investment-related programmes and news will assist in overcoming their apprehension, hesitation, and suspicion about the stock market (personal and attitudinal constraints) and thus improve their stock market participation.

Limitation of the study

- The current research is limited to the state of Kerala. The study's findings may not be applicable to other sections of the country. Geographical, socioeconomic, and cultural variations can lead to variances in respondents' perceptions.
- The current study relies on primary data gathered through the use of a pre-designed questionnaire. Despite the fact that every precaution was taken throughout the design and administration of the questionnaire, the risk of personal bias cannot be ruled out.
- Despite greatest efforts to persuade respondents to supply the information requested, some respondents were hesitant and declined to complete the questionnaire for various reasons.

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