DO EQUITY INVESTORS' SOCIO-ECONOMIC IDENTITIES HAVE ASSOCIATION WITH THEIR PERCEIVED RISK? EVIDENCE FROM THE EMERGING MARKET

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Abstract

Equity investors' decision-making efficacy can be enhanced by enlarging the understanding horizon on the matrix between their socio-economic identities and risk perception (Su et al., 2022; Shah et al., 2020). This work attempts to examine the relationship between equity investors' socio-economic identities and their perceived risk in Assam, a state in North-East India. The study uses a structured instrument that undergoes a pretest to assess its content validity using Lawshe's (1975) content validity ratio (CVR) method. The study applied Cronbach's alpha to test the instrument reliability of 15 items which stood at 0.749. The study employed a comprehensive sample size of 408 retail investors, picked up using a systematic random sampling technique, hailing from the cities of Guwahati and Silchar in the state of Assam (response rate: 69.54 percent). The findings of the study indicated that there is a substantial inverse relationship between age and income, and equity investors' total risk perception. However, the effect of investing experience on risk perception was found to be insignificant. Previous research has also reported similar findings (Bairagi & Chakraborty, 2018). Despite the limitations inherent in the study, such as the sample size being confined to a certain geographic location or demographic group, it is anticipated that this research will make a valuable contribution to the current body of literature on investor risk behaviour. Additionally, it is intended to have practical implications for brokerage houses, market analysts, and regulators within the financial industry.

Keywords: Equity Investors, Risk Perception, Socio-Economic Identities, Financial Industry, Lawshe's CVR, North East India

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1. INTRODUCTION

Investing in companies' stocks has become a popular way to make money in the fast-paced world of financial markets. As technology has advanced, the easy accessibility of online trading platforms has piqued the interest of the general public, especially the younger ones, to access and trade stocks through online platforms (Raut & Das, 2017). This phenomenon has induced interest and participation among everyday investors who look to capitalise on market opportunities and grow their wealth. However, equity investment inherently involves varying degrees of risk (Harvey, 1995).

The perception of financial market risk is considered to be a key factor in global economic swings (Pflueger et al., 2020). Marfatia (2020) argued that the extent and form of integration in global stock markets are influenced by investors' perceptions of risk. One may understand the meaning of risk perception in the equity market as how investors see and analyse the level of risk associated with buying and trading shares. For instance, when investors perceive a higher level of risk, they may hesitate to buy or trade on shares (Ainia & Lutfi, 2019).

It is evident from earlier studies that investors perceive this risk differently based on several psychological as well as market-related factors (Sindhuk & Kumar, 2014; Wang et al., 2006). Gumus and Dayioglu (2015) found that perceived risk is influenced by emotional factors like timidity, and coherence, and psychological factors like prejudices and cognitive inconsistencies. By and large, investors' risk behaviour in the financial market relies on how they receive information while making investment decisions (Riaz & Hunjra, 2015). Behavioural finance has emerged as a new field that deals with the psychological aspects of investors (Gill et al., 2018). The theories of behavioural finance hold that retail investors are influenced by diverse subjective processes in their investment decision-making processes while measuring risk (Bairagi & Chakraborty, 2018; Sobaih & Elshaer, 2023).

The role of socio-economic variables in shaping risk perception has also been widely acknowledged as an essential factor in the process of making investment decisions (Prasad et al., 2021). Studies have shown that investors' socio-economic background, such as income, education level, occupation, age, and experience, has a significant impact on their perception of risk in financial markets (Bairagi & Chakraborty, 2018; Cohen et al., 2011). Shah et al. (2020) found that individuals with higher income and experience levels might have a higher risk tolerance and perceive investments as less risky compared to those with lower income and experience levels.

In India, the growing awareness of the different products of the stock market has contributed to the upsurge in the number of investors (Shah & Patel, 2016). As per the report by Press Trust of India (2021), after the COVID-19 pandemic, 70% of the new clientele of the leading brokerage firms in India were first-time investors aged under 30. The North Eastern Region of India has eight states that exhibit a commendable literacy rate, although they have a rather sluggish pace in terms of infrastructural advancements in every aspect, including financial aspects till the last decade. However, in light of the current expansion of infrastructure development across several sectors, particularly in the financial domain, there has been a notable surge in the number of equity investors (Bombay Stock Exchange [BSE], n.d.). The state of Assam has been selected as a research location owing to its large population size compared to other North Eastern states of India (Ministry of Development of North Eastern Region, n.d.). Furthermore, Assam's economic underdevelopment and geographical isolation, in contrast to other more prominent Indian states, present a unique opportunity to examine the connection between socio-economic identities and equity investors' perception of risk. The study by Singh and Bhattacharjee (2019) focused exclusively on measuring and identifying the factors of risk perception of equity investors in economically underdeveloped southern Assam. However, this study attempts to make a comprehensive effort to examine the relationship between the socio-economic identities of equity investors and their perceived risk towards the equity market. In Assam, Guwahati city is the largest city in terms of population and commercial hub of North East India, while Silchar city is recognised as the gateway to three North Eastern Region states (Dikshit & Dikshit, 2014).

Therefore, understanding how socio-economic identities shape equity investors' risk perception is essential for policymakers, practitioners, and stakeholders. With the upsurge in the number of investors, there is a need to assess the relationship of equity investors' socio-economic identities with their risk behaviour. The research aims to identify and select the risk factors of retail investor investment behaviour in the equity market and examine the association of socio-economic identities with their perceived risk in the state of Assam, India. In terms of retail investors' risk perceptions in Northeast India, particularly Assam, the literature review reveals that relatively little research has been conducted. Thus, an effort has been made to address the gap. Perhaps the results of the study are anticipated to contribute valuable insights into how socio-economic identities influence investors' perceptions of the risk associated with equity investments.

The rest of the paper is structured as follows. Section 1 includes an introduction that provides an overview of the study. Section 2 deals with an overview of the prior related research work done on the theme of the study in the form of excerpts. Section 3 explains the methodological approaches adopted for the study. Section 4 showcases the analysis in tabular form, followed by results and discussions, and Section 5 provides the conclusion of the study, which includes the implications and limitations of the study and the scope for future research.

2. LITERATURE REVIEW

The literature review section provides a concise overview of previous research conducted, encompassing both theoretical and empirical

studies. The contemporary application of the concept of "risk perception" has been observed throughout an interdisciplinary framework (Lee et al., 2015; Sullivan-Wiley & Short Gianotti, 2017). Numerous theories have been formulated by a diverse range of philosophers. Among them is the cognitive theory of risk perception, which centred on the examination of how individuals engage in the cognitive processes and biases that influence their assessment and evaluation of risks (Rundmo & Nordfjærn, 2017).

Kahneman and Tversky (1979) critiqued the expected utility theory and propounded the prospect theory, which explains how people make decisions under conditions of uncertainty and risk. Singh and Bhattacharjee (2019) also explain the concept of social action theory as individuals engage in risky behaviour due to the influence of their peers or the prevailing perception within their community that the activity carries minimal risk.

Additionally, theoretical models such as the psychometric paradigm, the mental noise model, the negative dominance model, the trust determination model, and the social amplification of risk framework have been developed to explain how individuals perceive risks (Paek & Hove, 2017; Siegrist et al., 2005; Renn et al., 1992). Further, the theory of planned behaviour propounded by Ajzen (1985) was applied by many researchers in the field of behavioural finance to understand investors' intentions to invest in the financial market (Sondari & Sudarsono, 2015; Mahardhika & Zakiyah, 2020; Akhtar & Das, 2019).

Rosi et al. (2021) explained "risk perception" as a cognitive process that directs people's behaviours when faced with events that could be dangerous. According to Slovic and Peters (2006), the process of risk analysis involves the application of logical reasoning, scientific deliberation, and rationality to the assessment and decision-making regarding risks. Darker (2013) stated that there are three dimensions of perceived risk: 1) perceived likelihood, 2) perceived susceptibility, and 3) perceived severity. Singh and Bhattacharjee (2019) also highlighted that perceived risk influences both the sources and types of information used by retail investors.

Prior studies have identified multiple factors that are directly or indirectly associated with influencing investors' risk perception in the capital market (Hamid et al., 2019; Singh & Bhattacharjee, 2019; Manimozhy & Borah, 2018; Borah & Awungshi, 2023). Merikas et al. (2004) examined the application of the principles of behavioural finance theory to the economic factors that influence investors' investment decisions under conditions of uncertainty on the Athens Stock Exchange and observed that speculative factors like "get rich quick", "recent price movements in the firm's stocks", and "affordable share price" influenced significantly. Nagy and Obenberger (1994) identified and classified factors as "advocate recommendation", "personal-financial needs", "neutral information", "accounting information", "social relevance", "classic" and "firm image". It is also evident that emotional factors such as "lack of knowledge", "lack of confidence", "lack of trust", etc., have a high influence on equity investors' risk behaviour (Vlaev et al., 2009).

Out of the greater portion of work conducted in line with the objective of this study, few empirical evidence based on socio-economic and demographic factors are narrated sequentially. Deb and Singh (2017) applied ordinal logistic regression to examine how demographic and socio-economic characteristics affect investors' risk perception in Tripura and revealed that age, gender, family income, and experience significantly affect retail investors in Mutual funds. Manocha et al. (2023) run structural equation modelling in their research to investigate the moderating impact of social characteristics on the relationship between the investment behaviour of farmers and its determinants.

The research carried out by Onsomu (2015) found that overconfidence bias, representativeness bias, confirmation bias, and the disposition effect influence investors across all age groups studied (18–30, 31–40, 41–50, and over 50). Overconfidence bias was shown to have a substantial correlation with age. Salim and Setyawan (2023) noted in their research that demographic characteristics like family members and behavioural bias in the form of overconfidence exhibit a significant positive association.

The work of Cohn et al. (1975) revealed preliminary evidence that investor wealth decreases risk aversion. Also, the research findings of Riley and Chow (1992) indicate that risk aversion exhibits a decrease not only in conjunction with an increase in wealth, but also with advancing age, higher income levels, and greater educational attainment.

Research conducted by Su et al. (2022) shows that income, gender, and investing experience were strongly related to the investment decisions of retail investors in Vietnam. On the other hand, Kurniawati et al. (2022) evaluated the effects of investment understanding, risk perception, income, and investment experience on capital market investors in Klaten Regency and found that investment understanding and income positively affect capital market investors, while risk perception and investment experience do not.

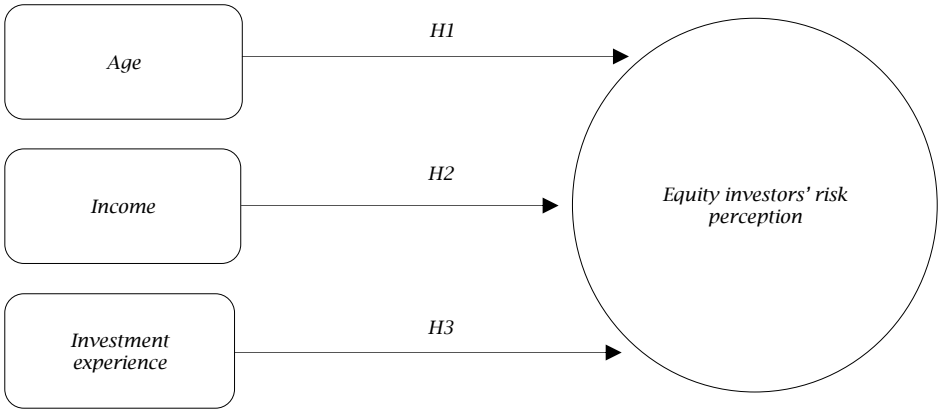
Isidore and Christie (2019) discovered that investors with higher yearly income were less likely to be affected by behavioural biases than investors with lower annual income. According to Charles and Kasilingam (2013), investors frequently make unwise decisions due to biases that influence their investment choices. Their findings also indicated that investors' age significantly influences their investment behaviour. Therefore, based on the earlier studies, the following hypotheses were adopted and tested:

H1: Age does not have a significant relationship with equity investors' risk perception.

H2: Income does not have a significant relationship with equity investors' risk perception.

H3: Investment experience does not have a significant relationship with equity investors' risk perception.

Figure 1. Hypothetical framework



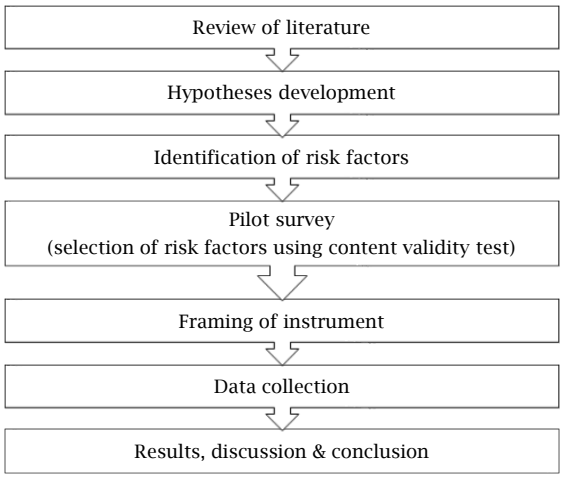
Source: Authors' elaboration.

3. RESEARCH METHODOLOGY

3.1. Research plan

After having gone through the literature review, it was understood on the part of the researcher how to approach the research work. It is vital in every research to draw out a systematic research plan. The research plan refers to a systematic and organized approach or framework that is used to achieve the goals of a research study (Gupta, 2023). Therefore, the research plan employed here is both descriptive and empirical in nature. Figure 2 illustrates the research plan that was implemented by the researcher to conduct this study.

Figure 2. Research plan flowchart



Source: Authors' elaboration.

3.2. Instrument construction and validation

The initial stage of the study consisted of a comprehensive review of the previously done works on the theme of the research. In the subsequent phase, the variables that possessed the potential to impact the risk behaviour of investors were identified (Vlaev et al., 2009; Sarkar & Sahu, 2017; Sindhuk & Kumar, 2014). The identified items were isolated for the purpose of this study and a preliminary investigation using a pilot questionnaire was conducted on the identified risk factors to determine the item's essentiality. For this, a survey was carried out with the intention to verify the accuracy and comprehensiveness of the identified risk factors (17 items) using a three-point scale, namely "essential", "useful but not essential" and "not necessary" distributed among a group of 20 experts, consisting of both academician and investors. After having completed the pilot survey, the content validity test was done by applying Lawshe's (1975) method using the following equation:

$$Content\ validity\ ratio\ (CVR) = \frac{n_e - (\frac{N}{2})}{\frac{N}{2}} \qquad (1)$$

where, n_e is the number of panel members indicating "essential", and N is the total no of panel members (van Rensburg et al., 2011). The results of the coefficient derived from Lawshe's (1975) content validity ratio (CVR) varied between 0 to 1. The ratios were then put to comparison with Lawshe's minimal CVR using a confidence interval of p = 0.05, as determined by the number of experts involved in the study (Taherdoost, 2016). Based on the data provided, the minimal coefficient of CVR for a sample size of 20 experts is 0.42. The coefficient of CVR for two items was found to be less than 0.42, making them ineligible for consideration (Duru et al., 2015). The result of the same is attached in the Appendix. After having done the above test, 15 items were found to be valid and the selected items were finally used to frame the final questionnaire which consisted of two parts, i.e., part A consisted of the socio-economic variables, i.e., age, income and investment experience and part B consisted of the risk factors in statement form on a seven-point agreement ordinal scale from being one — the low extent to seven — high extent (Singh, 2019; Diefenbach et al., 1993). Investors were asked to express their opinions on the various factors of perceived risk in relation to the investment behaviour of retail investors. The language of the question put to respondents was in the form:

"*Furnished below please find the factors in the form of statements of the degree of capability of the factors of perceived risk aspect of retail investors' investment behaviour in being able to influence the retail investors' investment behaviour. You are*

requested to share your opinion over the relative contribution of each of the factors under study out of the degrees (seven) offered in the questionnaire, based on your perceptions over the matter. Please note that you are to share your perception over the matter in the form what you as a retail investor generally do and not in the form you should do".

3.3. Sample design

Investors from the general public who are documented clients of active broking houses registered under the National Stock Exchange (NSE) and the BSE in the Indian cities of Guwahati and Silchar were included in the sample. Convenience sampling was used to choose 18 brokerage firms since there was insufficient data to reliably estimate the size of the investor base. A total of 650 structured questionnaires, designed to elicit objective responses, were administered to a randomly chosen sample of investors from specific brokerage houses. These 650 questionnaires were distributed through both online means (using Google Forms) and in-person meetings. A total of 452 responses were collected, resulting in a response rate of 69.54%. Here, it is interesting to note that the responses through Google Forms were less as compared to in-person meetings. Following the implementation of data filtration techniques, a final sample size of 408 was subsequently considered using the Cochran equation for an unknown population and proportion (Uakarn et al., 2021).

3.4. Data analysis

The time frame for this data gathering was from January 2021 to October 2021. The data obtained through the application of a structured questionnaire was analyzed using SPSS (Statistical Package for Social Science) version 26. Cronbach's alpha was used to verify the internal consistency of the data (Bonett & Wright, 2015) (Table 2).

In order to check the normality of the data set Kolmogorov-Smirnov test was used. Kolmogorov-Smirnov test holds goods for sample size ≥ 50 (Mishra et al., 2019). The underlying principle of this statistical test is that if the p-value exceeds 0.05, it may be inferred that the data follows a normal distribution. The obtained p-value for the test was determined to be 0.01, indicating rejection of the null hypothesis of a normally distributed sample and having strong evidence that the data does not follow a normal distribution.

Thus, in light of the absence of parametric assumptions, the Spearman rank order correlation (rho) test was utilized as an alternative to the t-test to assess the significance of the correlation and investigate the connection between the risk-related items and the socio-economic identities of equity investors. If we encounter a parametric scenario, we can employ a t-test to determine if there exists a statistically significant link or not. When dealing with non-normally distributed data collected via an ordinal scale, it is necessary to employ a non-parametric test, namely, the rho test (Orcan, 2020; de Raadt et al., 2021). Therefore, this alternative method is used in this study to determine the statistical significance of the relationship between the independent variables, i.e., age, income and investment experience and dependent variables, i.e., the risk factors. Hence, it is considered the appropriate estimator for this study. In addition, the more traditional descriptive statistics such as mean and standard deviation were also used to provide a comprehensive perspective about the risk-related items.

4. RESULTS AND DISCUSSION

Table 1 presents the socio-economic characteristics of the investors who were included in the research. The socio-economic characteristics considered for the study were age (in completed years), income (average annual income for the past five years in Indian rupee, INR) and investment experience (in completed years). In the context of age groups, it is evident that a significant proportion of investors, specifically 39%, fall within the age range of 18–30 years old, indicating a majority representation. Based on the provided information, it can be inferred that a greater proportion of young investors exhibit a preference for equity market investments compared to their older counterparts, with the latter group comprising just 9.3% of those aged 51 years old and above. Further, it can also be observed that 43.4% of the investors fall within the income range of INR50,000–250,000, while a significantly smaller proportion, i.e., 15.9% belong to the higher income group of INR500,001 and above. From this study, it can be inferred that investors from low-income categories also exhibit an interest in investing in the equity market. Additionally, in investment experience, 79.7% of the investors picked up for the study have less experience, i.e., 1–5 years comparatively with those, i.e., 6.1% having investment experience of more than 11 years.

Table 1. Socio-economic profile of the investors

No.	*Socio-economic characteristics*	*Interval*	*Number of investors*	*Percentage (%)*
1	Age (in completed years)	18–30 years old	159	39
		31–40 years old	151	37
		41–50 years old	60	14.7
		51 years old and above	38	9.3
	Total		408	100
2	Income (in INR)	50,000–250,000	177	43.4
		250,001–500,000	166	40.7
		500,001 and above	65	15.9
	Total		408	100
3	Investment experience (in completed years)	1–5 years	325	79.7
		6–10 years	58	14.2
		11 years and above	25	6.1
	Total		408	100

Source: Authors' calculation.

Table 2. Reliability statistics of the scale

No. of items	*Cronbach's alpha*
15	0.749

Source: Prepared by authors using SPSS output.

Table 3. Scale statistics

Mean	*Variance*	*Std. dev.*	*N*
70.22	90.273	9.501	15

Source: Prepared by authors using SPSS output.

Table 2 presents the reliability statistics of the scale constructed. The reliability of the scale was assessed using Cronbach's alpha, which is widely recognised as a reliable measure of internal consistency for scales (Schweizer, 2011). The Cronbach's alpha for the scale used in the questionnaire was measured at 0.749, which means that the scale is quite consistent and acceptable (Nunnally, 1978).

Table 3 highlights the overall scale statistics where the mean value is 70.22 and, the variance is 90.273, for 15 items. From this, it can be inferred that the data points in the set are relatively dispersed, as indicated by the high variance.

Table 4. Item statistics

No.	*Risk-related items*	*N Stat.*	*Min.*	*Max.*	*Mean*	*Std. dev.*
1	Analyzing intraday price movements	408	1	7	4.59	1.903
2	Analyzing past trends in stock prices	408	1	7	5.03	1.409
3	Monitoring and evaluating stock ratings	408	1	7	4.75	1.443
4	Checking companies' volume of stock	408	1	7	5.17	1.338
5	Checking indices and their movements	408	1	7	4.84	1.288
6	Keeping an eye on the current inflation level and possibilities in the near future	408	1	7	4.95	1.597
7	Checking the trends in the fluctuation in foreign exchange	408	1	7	3.87	1.812
8	Keeping in mind the possibilities of changes in the government's economic policy	408	1	7	5.05	1.502
9	Keeping in mind the possibilities of changes in the government's industrial policy	408	1	7	4.41	1.670
10	Assessing a country's international image in relation to its industrial exports	408	1	7	4.27	1.520
11	Matching the position of the investor's stock portfolio with the market	408	1	7	4.95	1.437
12	Depending on hunch and subjective imagination	408	1	7	4.67	1.386
13	Monitoring investment patterns of famous investors	408	1	7	4.02	1.586
14	Seeking the opinion of the experts in the equity stock market	408	1	7	5.15	1.384
15	Seeking broker's opinion	408	1	7	4.50	1.713

Source: Prepared by authors using SPSS output.

Table 4 delineates the descriptive statistics for the risk factors examined in the study. Among these, the risk factor "checking companies' volume of stock" exhibits the highest mean score of 5.17 and the lowest standard deviation of 1.338. This is followed by the risk factor "seeking the opinion of the experts in the equity stock market", which has a mean score of 5.15 and a standard deviation of 1.384. Also, the risk factor "checking the trends in the fluctuation in foreign exchange" has obtained the lowest mean score of 3.87 and the risk factor "analyzing intraday price movements" has the highest standard deviation, with a value of 1.903. This provides a comprehensive perspective on the subject matter of the study that investors prioritise more on the analysis of a company's stock volume and seek the opinion of the experts in the equity stock market as a perceived risk factor when making decisions related to share purchases.

Table 5. Relationship between equity investors' socio-economic identities and their risk perception using Spearman rank order correlation

Variables	*N*	*Spearman correlation coefficient (rho)*	*Sig. (2-tailed)*	*Remarks*
*Age * risk perception*	408	–0.138	p (0.005)*	Significant
*Income * risk perception*	408	–0.109	p (0.028)**	Significant
*Investment experience * risk perception*	408	–0.079	p (0.111)	Insignificant

*Note: * Correlation is significant at the 0.01 level (2-tailed); ** Correlation is significant at the 0.05 level (2-tailed).*
Source: Prepared by authors using SPSS output.

Table 5 presents the findings of the Spearman rank correlation (rho) analysis conducted to examine the relationship between select socio-economic characteristics (namely *age*, *income*, and *investment experience*) of retail investors and their overall *risk perception*, measured through 15 selected risk-related items (Table 4). Table 5 reveals a significant correlation between *age* and the *risk perception* of equity investors, as indicated by the p-value of 0.005, which falls below the conventional significance level of 0.05. Interestingly, the association is strong at the 0.01 level. Nevertheless, it is evident that a weak inverse relationship exists, as indicated by the correlation coefficient value of -0.138. It is to be noted that the value of the correlation coefficient lies between negative 1 and positive 1. A value of coefficient = +1 implies a complete agreement between the two sets of ranks and -1 implies that there is a complete disagreement between the ranks (Zar, 2014).

Therefore, *H1* formulated based on prior studies may not be accepted. Hence, an inference can be drawn out that as investors get older, their perceived risk level reduces while purchasing equity shares.

Similarly, it is also clear that there exists a substantial inverse relationship between *income* and *risk perception*, with a coefficient of -0.109 and ($p = 0.028$) which is less than 0.05 as portrayed in Table 5; therefore, *H2* formulated may not be accepted. This gives the inference that investors with higher income levels tend to have a lower risk perception.

In relation to *investment experience* and *risk perception*, as displayed in Table 5, it is noteworthy to mention that the statistical analysis did not yield a significant correlation between investment experience and investors' overall risk perception with a p-value of 0.111 which is greater than 0.05. However, it is interesting to note the presence of a very weak inverse relationship between these two variables. Therefore, there is not enough evidence to reject *H3*. This provides an impression that equity investors' investing experience has no substantial relation with their perceived risk aspect.

Based on the results it can be discussed that the outcome of this research has tried to offer a nuanced understanding of the correlation between socio-economic identities and perceived risk aspects of retail investors' investment behaviour in the Indian equity market. Further, it can be summarized that the age and income level of investors have a greater association with their overall risk perception in the equity market compared to their degree of expertise. However, the findings from this study are indicative but non-exhaustive. Similar findings with respect to investors' socio-economic identities and their association with risk behaviour were also evident in prior studies (Bairagi & Chakraborty, 2018). Moreover, the study underscored the need to do more research in this domain to substantiate and enhance the validity and scope of these results.

5. CONCLUSION

This research work highlights the dynamic nature of risk perception and the need for investors to adapt their risk tolerance in response to changing economic conditions. The research has sought to investigate the relationship of socio-economic factors, i.e., age, income, and investment experience with equity investors' risk perception. Based on the investigation, there is an inverse relationship between age and risk perception. This means that younger individuals, tend to have a higher sense of perceived risk. Hence, it is imperative for brokerage houses and other stakeholders to implement a strategic approach to alleviate risk perception among younger age groups. Similarly, while analysing income levels, it was discovered that those in the lower income bracket exhibit a greater degree of risk perception. Therefore, the Securities Exchange Board of India (SEBI) should also prioritise the development of policies that enable brokerage firms to customise their offerings to cater to the specific requirements of their clients, taking into account the risk preferences of various socio-economic groups of investors. This approach will incentivize investors to make intelligent investment choices by equipping them with comprehensive knowledge and effective risk management skills. Whereas, investment experience does not seem to have a significant relationship with the risk behaviour of the investors. By and large, the relationship between risk perception with all three variables is found to be weak. However, by closely looking into the statistical inference of the findings it can be noticed that the degree of association may be changed based on large sample studies. The findings from this study are also found to be consistent with previous research (Kurniawati et al., 2022; Su et al., 2022; Bairagi & Chakraborty, 2018) and are anticipated to contribute to the existing literature on investor risk behaviour by covering one of the remote regions of India through the study.

The findings of this study will also have strong practical implications for market analysts and other stakeholders in the financial industry. Although this study offers interesting information into the relationship between select socio-economic identities and risk perception among equity investors of Guwahati and Silchar cities of Assam state, it has to acknowledge certain limitations. Primarily, the research mostly depended on the subjective assessment of risk perception by investors, which introduces a likelihood of bias and errors. The sample's confinement to a particular geographic region or demographic group is another one. Therefore, future scholars may consider conducting inquiries in rural and semi-urban areas to authenticate the results. This study solely investigates the correlation between socio-economic factors and risk perception. However, future studies should consider selecting a more varied sample. Moreover, subsequent investigations should explore the influence of additional socio-economic identities, including gender. Furthermore, there is also an opportunity to do more in-depth research by comparing the socio-economic identities of crypto investors and their risk perception.

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APPENDIX

Table A.1. Calculation of CVR using Lawshe's (1975) method based on experts' opinion

Risk related items	*N (total No. of experts)*	*Essential*	*Essential but not useful*	*Not necessary*	*CVR*
Analyzing intraday price movements	20	15	3	2	0.5
Analyzing past trends of stock prices	20	18	2	0	0.8
Monitoring and evaluating stock ratings	20	16	3	1	0.6
Checking companies' volume of stock	20	18	0	2	0.8
Checking companies' accounting information	20	14	4	2	0.4*
Checking indices and its movements	20	19	1	0	0.9
Keeping an eye on current inflation level and possibilities in near future	20	16	2	2	0.6
Checking the trends in the fluctuation in foreign exchange	20	15	3	2	0.5
Keeping in mind the possibilities of changes in the government economic policy	20	16	4	0	0.6
Keeping in mind the possibilities of changes in the government industrial policy	20	15	5	0	0.5
Assessing countries international image in relation to its industrial exports	20	17	3	0	0.7
Matching position of investor's stock portfolio with the market	20	20	0	0	1
Keeping in mind the monsoon forecast status	20	12	6	2	0.2*
Depending on hunch and subjective imagination	20	18	2	0	0.8
Monitoring investment pattern of famous investors	20	19	1	0	0.9
Seeking opinion of the experts in the equity stock market	20	20	0	0	1
Seeking broker's opinion	20	19	1	0	0.9

*Note: * Since the CVR is less than the minimum value, i.e., 0.42 for 20 experts, the items were not considered for framing the final instrument.*