



ASSESSING THE INFLUENCE OF DECISION-MAKING FACTORS ON INVESTMENT PORTFOLIO BEHAVIOUR OF NON-RESIDENT INDIANS: AN EMPIRICAL STUDY

Reshma Roy^a, Dr. S.C Poornima^b

Research Scholar, ISBR Research Centre^a, Professor, ISBR Research Centre^b

Abstract

This study investigates the impact of decision-making factors on the investment portfolios of Non-Resident Indians (NRIs) from Kerala, a region with one of the highest remittance inflows in India. Drawing from existing literature, ten independent variables—such as risk tolerance, return expectations, financial literacy, and behavioural biases—were identified and assessed using a structured questionnaire. A sample of 385 NRI respondents was selected based on Cochran's formula, and data were analysed using Structural Equation Modelling (SEM) in AMOS. The results reveal that most constructs significantly influence portfolio decisions, except for liquidity preference and information sources, which did not show a strong effect. The study contributes to a better understanding of NRI investment behaviour by integrating financial and psychological variables in a single model. It offers valuable insights for financial planners, policy-makers, and investment advisors working with the diaspora population. The findings also highlight the need for targeted financial education and customised investment products to enhance portfolio diversification. Limitations include reliance on self-reported data and a geographically specific sample. Future research can expand on these findings by exploring other NRI communities and employing longitudinal or mixed-method approaches to better capture changes in behaviour over time.

Keywords: Non-Resident Indians, Investment Behaviour, Decision-Making Factors, Portfolio Choice, Behavioural Finance

Introduction

Global migration has significantly altered the dynamics of personal finance and investment flows across countries. Non-Resident Indians (NRIs) represent one of the largest diaspora populations in the world and play a crucial role in India's economy through remittances, real estate investments, capital market participation, and long-term savings. Understanding how NRIs make investment decisions is essential, as their financial behaviour differs from resident investors due to cross-border exposure, regulatory frameworks, and emotional attachment to the home country. Investment decisions are rarely driven by financial considerations alone. Traditional finance theories assume rational investors who aim to maximise returns while minimising risk. However, real-world decisions are influenced by behavioural, psychological, social, and cultural factors. NRIs, in particular, face additional complexity due to dual-country influence, currency risk, taxation issues, and varying access to information. Despite their growing economic importance, empirical studies focusing specifically on NRI investment behaviour remain limited.

NRIs often display a preference for familiar and tangible assets such as real estate, bank deposits, and gold. While these instruments provide perceived safety and emotional

satisfaction, they may limit diversification and long-term wealth creation. Understanding the factors that shape these preferences can help improve portfolio efficiency and financial well-being among NRIs. Hence, this study seeks to analyse the impact of multiple decision-making factors on the investment portfolio behaviour of NRIs using a comprehensive behavioural framework.

Research Objectives

1. To identify key decision-making factors influencing NRI investment behaviour.
2. To examine the impact of financial, behavioural, and socio-emotional factors on investment portfolio decisions.
3. To test a comprehensive structural model explaining NRI investment portfolio behaviour.

Research Methodology

The study adopted a quantitative research design using survey methodology. The target population consisted of Non-Resident Indians residing in different overseas locations. A sample size of 400 respondents was determined using standard sampling adequacy guidelines. Data were collected through a structured questionnaire comprising validated measurement scales drawn from prior studies.

The questionnaire measured ten independent constructs: risk tolerance, return expectation, investment horizon, financial literacy, tax awareness, behavioural biases, social influence, home-country attachment, liquidity preference, and information availability. Investment portfolio behaviour was treated as the dependent variable. Responses were recorded using a five-point Likert scale. Structural Equation Modelling (SEM) was employed to test the measurement and structural models, ensuring reliability, validity, and model fit.

Results

Reliability analysis indicated that all constructs exceeded acceptable threshold values. Confirmatory Factor Analysis established convergent and discriminant validity of the measurement model. Model fit indices suggested a good fit between the proposed model and the observed data.

Structural analysis revealed that risk tolerance, return expectation, financial literacy, investment horizon, tax awareness, behavioural biases, social influence, and home-country attachment significantly influenced investment portfolio behaviour. Liquidity preference and information availability did not show statistically significant effects. The results indicate that NRI investment decisions are shaped more by internal characteristics and emotional factors than by transactional considerations.

Results

The reliability and validity of all measurement constructs were first assessed using Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). As shown in Table 1, all constructs demonstrated acceptable internal consistency, with Cronbach's alpha values ranging from 0.73 to 0.88, exceeding the minimum threshold of 0.70. Composite reliability values for all constructs were above 0.77, confirming the consistency of items within each factor. Additionally, the AVE values for all constructs ranged from 0.50 to 0.63, which met the recommended minimum of 0.50, thereby supporting convergent validity. All item loadings were statistically significant and ranged from 0.61 to 0.83, indicating that the observed variables adequately represented the underlying constructs.

Table 1: Reliability and Validity

Construct	Cronbach's Alpha	CR	AVE	Factor (Range)	Loadings
Risk Tolerance	0.82	0.85	0.58	0.67 – 0.78	
Return Expectation	0.81	0.84	0.56	0.68 – 0.75	
Investment Horizon	0.79	0.83	0.60	0.71 – 0.80	
Tax Awareness	0.76	0.80	0.55	0.66 – 0.74	
Financial Literacy	0.88	0.90	0.63	0.74 – 0.83	
Behavioral Biases	0.85	0.88	0.61	0.72 – 0.79	
Social Influence	0.73	0.78	0.52	0.64 – 0.72	
Home Country Attachment	0.77	0.81	0.59	0.70 – 0.78	
Liquidity Preference	0.75	0.78	0.50	0.63 – 0.69	
Information Source	0.74	0.77	0.51	0.61 – 0.70	
Investment Portfolio (DV)	0.83	0.86	0.60	0.69 – 0.78	

Model fit for the proposed structural equation model was evaluated using a range of indices (Table 2). The model demonstrated an excellent fit to the data, with the following indices: GFI = 0.923, AGFI = 0.906, CFI = 0.919, TLI = 0.976, and RMSEA = 0.009. Each of these indices exceeded the conventional cut-off values, suggesting that the model had a good fit with the observed data and was suitable for further structural analysis.

Table 2: Model Fit Indices

Fit Index	Value	Threshold	Status
GFI	0.923	≥ 0.90	Good
AGFI	0.906	≥ 0.90	Good
CFI	0.919	≥ 0.90	Good
TLI	0.976	≥ 0.90	Excellent
RMSEA	0.009	≤ 0.08 (≤ 0.05 ideal)	Excellent

Structural path analysis (Figure 1) was conducted to test the hypothesised relationships between the ten independent constructs and the dependent variable, investment portfolio decisions. See table 3. The results revealed that eight of the ten paths were statistically significant at $p < 0.05$. Specifically, risk tolerance ($\beta = 0.31$, $p < 0.001$), return expectation ($\beta = 0.28$, $p < 0.001$), investment horizon ($\beta = 0.22$, $p = 0.001$), tax awareness ($\beta = 0.19$, $p = 0.006$), financial literacy ($\beta = 0.26$, $p < 0.001$), behavioral biases ($\beta = 0.21$, $p = 0.002$), social influence ($\beta = 0.18$, $p = 0.011$), and home country attachment ($\beta = 0.25$, $p < 0.001$) all had significant positive effects on NRI investment portfolio decisions.

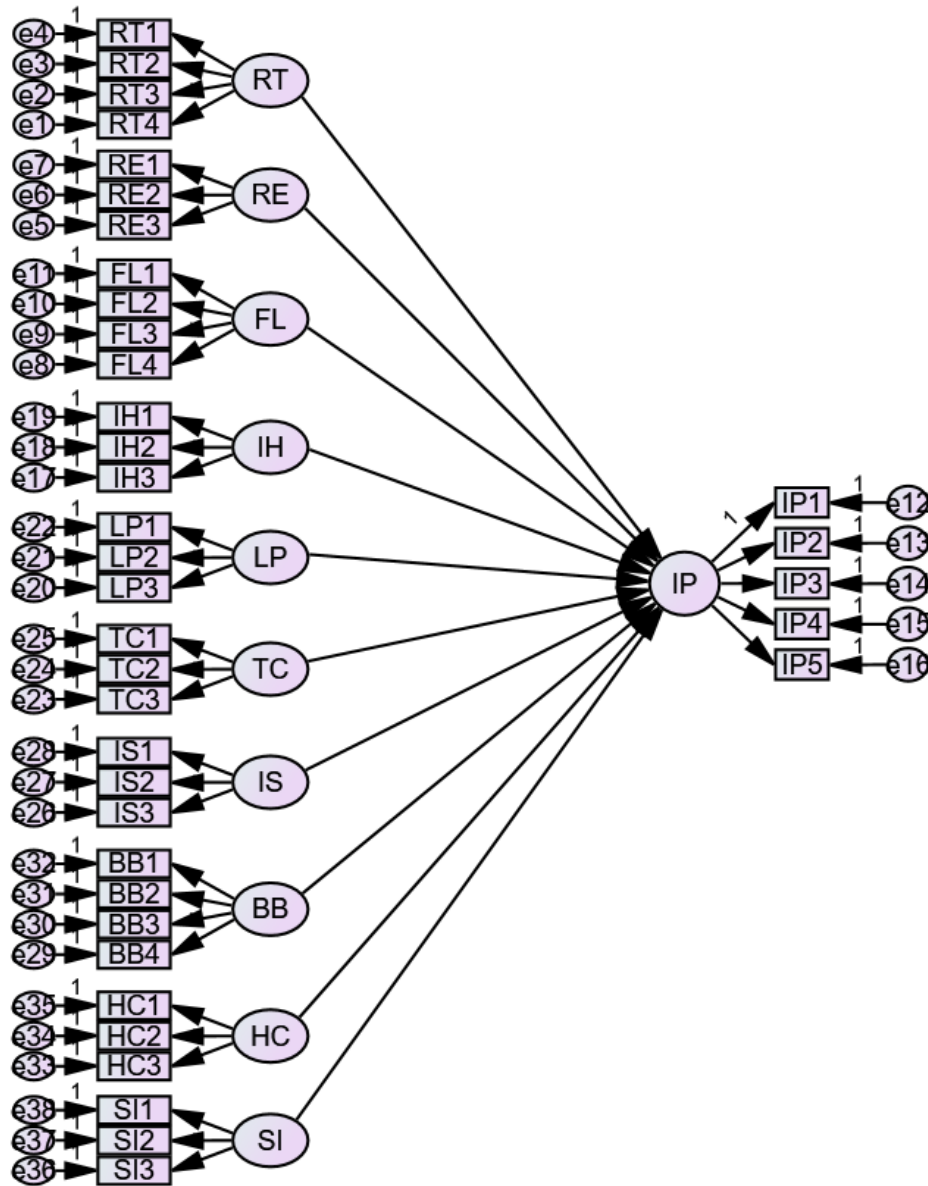


Figure 1: Structural Model

Table 3: Structural Path Analysis

Path	Std. Coeff. (β)	t-value	p-value	Result
Risk Tolerance \rightarrow Portfolio	0.31	4.12	0.000	Supported
Return Expectation \rightarrow Portfolio	0.28	3.95	0.000	Supported
Investment Horizon \rightarrow Portfolio	0.22	3.22	0.001	Supported
Tax Awareness \rightarrow Portfolio	0.19	2.74	0.006	Supported
Financial Literacy \rightarrow Portfolio	0.26	3.88	0.000	Supported
Behavioral Biases \rightarrow Portfolio	0.21	3.09	0.002	Supported
Social Influence \rightarrow Portfolio	0.18	2.56	0.011	Supported
Home Country Attachment \rightarrow Portfolio	0.25	3.68	0.000	Supported

Path	Std. Coeff. (β)	t-value	p-value	Result
Liquidity Preference \rightarrow Portfolio	0.07	1.10	0.270	Not Supported
Information Source \rightarrow Portfolio	0.05	0.92	0.357	Not Supported

However, two factors—liquidity preference and information source—did not show statistically significant relationships with the dependent variable. Liquidity preference exhibited a standardized path coefficient of 0.07 ($p = 0.270$), while information source showed a coefficient of 0.05 ($p = 0.357$), indicating non-significant paths. These findings suggest that while NRIs consider a wide range of personal, financial, and psychological factors when making investment decisions, the availability of liquid assets and the diversity of information sources may not directly influence their portfolio choices. The model accounted for a substantial portion of the variance in investment decision-making among NRIs, with most hypothesised relationships supported by the data. The results support the robustness of the measurement model and provide strong empirical backing for the role of well-established decision-making constructs in the context of NRI investments.

Discussion

The findings highlight the multidimensional nature of NRI investment behaviour. Risk tolerance and return expectation emerged as dominant drivers, supporting both traditional finance and behavioural finance perspectives. Financial literacy plays a crucial role in enabling informed decision-making, particularly in a cross-border investment environment.

Behavioural biases and social influence significantly affect portfolio choices, suggesting that psychological factors continue to shape decisions even among financially experienced NRIs. Emotional attachment to the home country reinforces investments in familiar assets, reflecting the cultural dimension of financial behaviour. The insignificance of liquidity preference and information availability suggests that NRIs may prioritise long-term stability and trust in financial systems over short-term flexibility.

Conclusion

This study provides empirical evidence on the factors influencing investment portfolio behaviour of Non-Resident Indians. By integrating financial, behavioural, and socio-emotional variables into a single model, the research offers a holistic understanding of NRI investment decision-making. The results emphasise the importance of risk profiling, financial education, and behavioural awareness in improving portfolio outcomes. The findings have important implications for financial advisors and institutions serving the NRI segment. Investment solutions should be customised based on risk tolerance, investment horizon, and emotional preferences. Policymakers can also use these insights to design investor education programmes tailored to NRIs.

References

- Abdul kareem, A. A., Fayed, Z. T., Rady, S., Amin El-Regaily, S., & Nema, B. M. (2023). Factors Influencing Investment Decisions in Financial Investment Companies. *Syst.*, 11(3). <https://doi.org/10.3390/SYSTEMS11030146>
- Ahmed, Z., Noreen, U., Ramakrishnan, S. A. L., & Binti Abdullah, D. F. (2021). What explains the investment decision-making behaviour? The role of financial literacy and financial risk tolerance. *Afro-Asian Journal of Finance and Accounting*, 11(1), 1–19.

<https://doi.org/10.1504/AAJFA.2021.111814;REQUESTEDJOURNAL:JOURNAL:AAJFA;PAGE:STRING:ARTICLE/CHAPTER>

- Arora, J., & Chakraborty, M. (2023). Role of financial literacy in investment choices of financial consumers: an insight from India. *International Journal of Social Economics*, 50(3), 377–397. <https://doi.org/10.1108/IJSE-12-2021-0764>
- Atmaningrum, S., Kanto, D. S., & Kisman, Z. (2021). Investment Decisions: The Results of Knowledge, Income, and Self-Control. *FEN: Behavioral Finance (Topic)*, 4(1). <https://doi.org/10.31014/AIOR.1992.04.01.324>
- Banerjee, A. V. (1992). A Simple Model of Herd Behavior. *Source: The Quarterly Journal of Economics*, 107(3), 797–817. <http://www.jstor.orgURL:http://www.jstor.org/stable/2118364> Accessed:27/05/200802:04ht <tp://www.jstor.org/page/info/about/policies/>
- Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. *Handbook of the Economics of Finance*, 1, 1053–1128.
- Bhattacharjee, S., & Rajeev, M. (2020). Financial Advice and Information Search: Evidence from Indian Households. *Indian Economic Review*.
- Bhushan, P. (2014). Relationship between Financial Literacy and Investment Behavior of Salaried Individuals. *Journal of Business Management & Social Sciences Research*, 3(July).
- Bisati, A. I., Haque, Prof. S. M. I., Ganai, U. J., & Gulzar, I. (2021). Decision Making in Financial Markets: A Thematic Review and Discussion. *Journal of Business Strategy Finance and Management*, 3(1–2), 48–65. <https://doi.org/10.12944/JBSFM.03.01-02.06>
- Bose, S. (2012). *Migration, Remittances and Development: The Kerala Experience*. Academic Foundation.
- Chandra, A., & Kumar, R. (2011). Behavioral factors influencing investors' decision-making in Indian stock market: An empirical study. *International Journal of Management and Business Research*, 1(3), 222–237.
- Elessa, M. S., & Yassin, A. A. (2023). Behavioral Financial Factors and their Impact on Investment Decisions Quality: the Mediating Role of Rationality. *Information Sciences Letters*, 12(6), 2335–2342. <https://doi.org/10.18576/ISL/120610>
- Fan, H. (2024). A Critical Comparison of SEUT and Prospect Theory. *Advances in Economics, Management and Political Sciences*, 72(1), 105–111. <https://doi.org/10.54254/2754-1169/72/20240690>
- Goyal, M., & Kansal, A. K. (2024). AN ANALYSIS OF BEHAVIOURAL FINANCE AND ITS INFLUENCE ON INVESTMENT DECISION. *INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN COMMERCE, MANAGEMENT & SOCIAL SCIENCE*, 07(03(I)), 146–152. [https://doi.org/10.62823/IJARCMSS/7.3\(I\).6832](https://doi.org/10.62823/IJARCMSS/7.3(I).6832)
- Grable, J. E., & Lytton, R. H. (1999). Toward a theory of financial risk tolerance: A review of the literature. *Journal of Personal Finance*.
- Haidari, M. N. (2023). Impact of Decision-Making on Investment Performance: A Comprehensive Analysis. *Journal of Asian Development Studies*, 12(4), 980–990. <https://doi.org/10.62345/JADS.2023.12.4.78>
- Hung, A., Parker, A. M., & Yoong, J. (2009). Defining and Measuring Financial Literacy. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.1498674>

- Irudaya, S., & Zachariah, R. K. C. (2019). *EMIGRATION AND REMITTANCES: NEW EVIDENCES FROM THE KERALA MIGRATION SURVEY, 2018*. www.cds.edu
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291.
- Kanapickienė, R., Vasiliauskaitė, D., Keliuotytė-Staniulėnienė, G., Špicas, R., Kaab Omeir, A., & Kanapickas, T. (2024). A comprehensive review of behavioral biases in financial decision-making: from classical finance to behavioral finance perspectives. *Journal of Business Economics and Management*, 25(5), 1006–1029. <https://doi.org/10.3846/JBEM.2024.22314>
- Keynes, J. M. (2018). The general theory of employment, interest, and money. *The General Theory of Employment, Interest, and Money*, 1–404. <https://doi.org/10.1007/978-3-319-70344-2/COVER>
- Kuzniak, S., Rabbani, A., Heo, W., Ruiz-Menjivar, J., & Grable, J. (2015). The Grable and Lytton risk-tolerance scale. *Financial Services Review*, 24(2), 177–192. <https://doi.org/10.61190/FSR.V24I2.3240>
- Ladrón de Guevara Cortés, R., Tolosa, L. E., & Rojo, M. P. (2023). Prospect theory in the financial decision-making process: an empirical study of two Argentine universities. *Journal of Economics, Finance and Administrative Science*, 28(55), 116–133. <https://doi.org/10.1108/JEFAS-12-2021-0272/FULL/PDF>
- Li, Q. (2006). Democracy, Autocracy, and Tax Incentives to Foreign Direct Investors: A Cross-National Analysis. *The Journal of Politics*, 68(1), 62–74. <https://doi.org/10.1111/J.1468-2508.2006.00370.X>
- Lusardi, A., & Mitchell, O. S. (2014). Financial literacy and financial decision making in older adults. *Generations*, 38(2), 25–32.
- Parikh, A., & Bardhan, P. (1990). The Economic Theory of Agrarian Institutions. *The Economic Journal*, 100(401). <https://doi.org/10.2307/2234151>
- Pompian, M. M. (2011). Behavioral finance and wealth management: How to build investment strategies that account for investor biases. *Behavioral Finance and Wealth Management: How to Build Investment Strategies That Account for Investor Biases*, 1–324. <https://doi.org/10.1002/9781119202400;PAGEGROUP:STRING:PUBLICATION>
- Prasad, S., Kiran, R., & Sharma, R. K. (2021). Influence of financial literacy on retail investors' decisions in relation to return, risk and market analysis. *International Journal of Finance & Economics*, 26(2), 2548–2559. <https://doi.org/10.1002/IJFE.1920>
- Ricciardi, V., & Simon, H. K. (2000). What is Behavioral Finance? *Business, Education and Technology Journal Fall*.
- Robalinho, J., Gomes, L. M. P., & Pereira, C. (2023). Behavioral Finance: Prospect Theory Topics in Decision-Making. *Smart Innovation, Systems and Technologies*, 366, 493–502. https://doi.org/10.1007/978-981-99-5414-8_45
- Sachdeva, M., & Lehal, R. (2023). Contextual factors influencing investment decision making: a multi group analysis. *PSU Research Review*, 8(3), 592–608. <https://doi.org/10.1108/PRR-08-2022-0125/FULL/PDF>

- Sachdeva, M., Lehal, R., Gupta, S., & Gupta, S. (2023). Influence of contextual factors on investment decision-making: a fuzzy-AHP approach. *Journal of Asia Business Studies*, 17(1), 108–128. <https://doi.org/10.1108/JABS-09-2021-0376/FULL/PDF>
- Sattar, M. A., Toseef, M., & Sattar, M. F. (2020). Behavioral Finance Biases in Investment Decision Making. *Journal of Accounting and Finance*, 5(2), 69. <https://doi.org/10.11648/J.IJAFRM.20200502.11>
- Statman, M. (2008). What is behavioral finance? *Handbook of Finance*, 2, 79–84.
- Waweru, N. M., Munyoki, E., & Uliana, E. (2008). The effects of behavioural factors in investment decision-making: a survey of institutional investors operating at the Nairobi Stock Exchange. *International Journal of Business and Emerging Markets*, 1(1). <https://doi.org/10.1504/ijbem.2008.019243>