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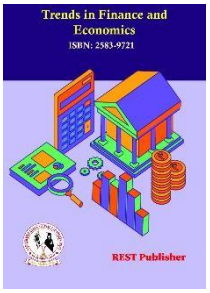

A Study Examining the Risk Tolerance of Individual Investors using DEMATEL Method

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Abstract: *This research explores the complex realm of risk tolerance among individual investors, a pivotal facet of financial decision-making. Given the growing interest in personal finance and investment, comprehending investors' perspectives on risk holds significant importance for professionals and scholars alike. The study utilized a mixed-methods approach, integrating surveys and interviews to gather comprehensive data from a diverse array of individual investors. Through analysis, it aimed to discern the primary factors shaping risk tolerance, encompassing demographic variables, investment history, financial knowledge, psychological traits, and contextual influences. Additionally, the research delved into preferences influence investment choices and portfolio strategies. The results illuminate the nuanced dynamics of risk tolerance among individual investors, elucidating the interplay between various determinants and their impact on investment outcomes. Furthermore, the study enriches existing literature by providing insights into tailored risk management strategies aligned with the distinctive characteristics and preferences of individual investors. financial situation, investment objectives, knowledge of financial market, factors like experience, and emotional intelligence contribute to determining one's risk tolerance. Investors' risk tolerance is often assessed through questionnaires or evaluations conducted by financial advisors, which consider factors like attitudes towards risk, investment goals, time horizon, and financial situation. Based on the assessment, investors may be categorized into different risk profiles such as conservative, moderate, or aggressive, with corresponding investment strategies suggested accordingly. It's essential for investors to honestly evaluate and be realistic about their risk tolerance, as overestimating it may lead to excessive risk-taking and potential losses during market downturns, while underestimating it may result in overly conservative investment choices. The DEMATEL method serves as a specialized approach for addressing specific problems characterized by interconnected issues. It involves identifying interdependencies among problems, establishing a hierarchical structure, and modelling potential solutions to create a workable system. The DEMATEL method contributes to a comprehensive understanding by utilizing directional charts and view charts. It finds application in various domains, including emergency management systems, where it integrates seamlessly with existing management practices. Investment Portfolio Composition, Investment Behaviour During Market Volatility, Risk Perception and Attitude, Investment Horizon and Goals and Past Investment Performance. the DEMATEL-based ranking of A Study Examining the Risk Tolerance of Individual Investors, it is evident that Investment Portfolio Composition holds the top position in terms of significance, while Risk Perception and Attitude ranks at the bottom with the least value.*

Keywords: *Investment Portfolio Composition, Investment Behaviour During Market Volatility, Risk Perception and Attitude, Investment Horizon and Goals and Past Investment Performance.*

1. INTRODUCTION

A study investigating the correlation between age and risk tolerance, utilizing the proportion of risky assets within an individual's portfolio as a measure, revealed a tendency for risk tolerance to rise with age. However, the findings are constrained by limitations and may not fully encompass the influence of other sociodemographic variables. It's essential to acknowledge that although age may impact risk tolerance, other socioeconomic factors and personal values play significant roles in shaping an individual's investment decisions. Extroverts are characterized by sociability, warmth, and amiability, often prioritizing instinct over strict logic and acting impulsively due to their responsiveness to external stimuli. Unlike introverts, extroverts find risks appealing and are more inclined

to take them, particularly in financial decision-making. While they may seek guidance from financial advisors, they ultimately rely on their personal preferences to make choices. Their generally optimistic outlook may lead them to perceive risks less gravely and potentially overlook market conditions [1]. Individual investors' risk tolerance holds paramount importance for financial advisors, policymakers, and researchers alike. This study endeavours to conduct a thorough its ramifications on investment behaviour, and the evolving trends in risk propensity. Through a meticulous review of literature, empirical analysis, and survey data, this research elucidates the multifaceted nature of risk tolerance, encompassing psychological, demographic, and socioeconomic dimensions [2]. It scrutinizes the repercussions of risk tolerance on investment decisions, asset allocation strategies, and portfolio performance while delving into the roles of financial literacy, investment knowledge, and experience in shaping risk preferences. Furthermore, this study delves into the impacts of market conditions, economic cycles, and socio-cultural factors on investors' risk-taking behaviour. The insights derived contribute to a deeper understanding of individual investors' risk tolerance, thereby providing avenues for personalized financial advice, investor education initiatives, and policy interventions geared towards bolstering investor protection and welfare [3]. Individual investors wield substantial influence in financial markets, molding asset prices, liquidity, and market dynamics. Their risk tolerance, denoting the willingness to embrace uncertainty and potential losses for the sake of investment returns, guides their asset allocation decisions, portfolio structure, and overall investment conduct. Grasping the determinants and implications of individual investors' risk tolerance is pivotal for financial advisors, wealth managers, and policymakers in furnishing effective guidance, mitigating risks, and enhancing investor well-being. This study aims to furnish a comprehensive exploration of individual investors' risk tolerance, unraveling its manifold facets, underlying factors, and evolving trends in investment conduct [4]. The notion of risk tolerance has been extensively probed in finance literature, drawing insights from diverse fields such as psychology, economics, and behavioral finance. A multitude of factors, including individual attributes, psychological biases, socioeconomic standing, and cultural influences, shape risk tolerance. Psychologists identify personality traits like openness to experience, conscientiousness, and sensation-seeking as linked with risk tolerance. Economic theories propose that factors such as income, wealth, age, and financial literacy impact risk tolerance. Behavioral finance scholarship underscores the role of cognitive biases, heuristics, and emotions in molding risk preferences [5]. This research employs a mixed-methods approach, amalgamating quantitative scrutiny of survey data with qualitative perspectives gleaned from interviews and case studies. A comprehensive review of extant literature furnishes a theoretical scaffold for comprehending the determinants and ramifications of individual investors' risk tolerance. Survey data culled from a diverse cohort of individual investors undergo statistical analysis techniques like regression analysis, factor analysis, and cluster analysis to discern patterns, trends, and correlations linked with risk tolerance [6]. The findings unveil risk tolerance as a nuanced and multi-dimensional construct, influenced by an interplay of psychological, demographic, and socioeconomic factors. Personality traits such as openness to experience, tolerance for ambiguity, and self-efficacy exert significant influence on risk preferences also shape risk tolerance, with younger investors and males displaying higher risk propensity. Additionally, socioeconomic factors such as income, wealth, employment status, and investment experience correlate with variations in risk tolerance levels [7]. Grasping the determinants of individual investors' risk tolerance holds profound implications for financial advisors, wealth managers, and policymakers. Tailoring investment guidance and portfolio recommendations to clients' risk inclinations can amplify client contentment, trust, and loyalty. Moreover, initiatives for investor education aimed at bolstering financial literacy, risk consciousness, and decision-making consonant with their risk tolerance levels. From a regulatory standpoint, interventions fostering transparency, disclosure, and investor safeguards can shield investors from undue risk exposure and financial exploitation [8]. Risk tolerance of individual investors increasingly understanding of scale importance, quantity it plays an important role in the analysis. financial sustainability, timing and factors such as investment objectives can be measured directly or may be collected from investors, risk tolerance level very complex. It is population, Psychological, Financial and Behavioural such as various individual and influenced by environmental factors. relatively objective and unlike the first three input factors unchanging, risk tolerance level can vary significantly among investors and is subject to multiple influencing factors [9]. Investor objectives, such as education, retirement planning, estate transfers, and financial stability, provide a framework for investment decisions. The investor horizon indicates the timeframe within which the investor can utilize their investments before needing them. This timeframe can be adjusted based on the investor's objectives. Financial stability reflects the current and future financial circumstances of the investor, including income, assets, and liabilities [10]. Risk tolerance of individuals to evaluate and consider for investment managers there is an important responsibility when devising investment plans to ensure their effectiveness and reliability. However, research indicates that this responsibility is often overlooked, leading to common neglect. Instead, investment managers may rely on general heuristics to categorize customers While these heuristics may seem convenient for formulating investment plans, they can pose significant dangers as they overlook the unique needs and risk tolerances of investors. Therefore, reliance solely on such heuristics should be questioned, especially considering the evidence from studies monitoring investment manager performance [11]. For instance, Rail (1995) reported that despite the average

mutual fund returning 12.5% annually over a five-year period until mid-1994, investors in these funds experienced a negative real return of 2.2%. Similarly, Quinn (1997) found that investors Since 1984 in Mutual Funds during the 12-year period up to 1996 average 10% over funds under earned. These findings investors' risk tolerance basically investors may fail to classify correctly they say that., leading to erroneous conclusions regarding investment choices such as mutual funds or stocks [12]. The reluctance of advisors to cater to individual investors stems from their preference for institutional clients who offer regular income through consultancy fees. Consequently, advisory services provided to individual investors may lack objectivity, as advisors prioritize attracting clients for account custody and earning commissions or brokerage fees. This approach overlooks the importance of evaluating an investor's financial characteristics, particularly their risk tolerance and financial status, which can be categorized into home ownership and income status [13]. Uzak University Risk of individual investors Finance on Endurance literacy and Population regarding the influence of factors a study was conducted. study to examine these relationships Multivariate regression analysis used. First, credibility the questionnaires was assessed, followed by a descriptive analysis of the participants' demographic characteristics. Subsequently, the empirical analysis included the presentation of financial literacy levels among participants [14]. Investments are intended to generate profits by entrusting property or funds for future gain. Investment involves committing resources or funds with the expectation of receiving benefits in the future. Investors engage in various forms of investment, aiming to enhance their welfare, spanning from employees and entrepreneurs to retirees. These investments can take diverse forms such as savings accounts, bank deposits, expensive purchases, metals, stocks, bonds, mutual funds, real estate, or even purchasing additional properties. However, before committing to any investment, investors must assess different options and levels of risk associated with each. Decision-making in investments entails facing uncertainties regarding expected outcomes, including the possibility of non-compliance or loss [15]. Investors not only consider potential returns but also evaluate the risks involved, which vary based on individual financial risk tolerance (FRT) levels. FRT represents an investor's willingness to endure negative changes or declines in the value or expectations of investments. Managing money is a daily aspect of personal finance, involving actions like saving, keeping financial records, and analysing balance sheets and cash flows. This process aims to effectively handle personal economic resources for long-term prosperity [16]. Investors across different age brackets exhibit notable differences in their investment preferences, as evidenced by research. pioneered the exploration Age and risk tolerance the relationship between older people usually have their own compared to younger peer’s low risk tolerance expressing. This trend often attributed to factors such as limited time for older individuals to recover from investment losses and biological changes associated with aging conducted thorough investigations into Age and risk tolerance the relationship between exhibits a non-linear pattern, there is risk tolerance rest increase in previous years of acquisition, it will decrease after that. However, for age and risk tolerance relationship between remains subject to debate, with studies presenting conflicting findings [17].

2. MATERIALS AND METHOD

Investment Portfolio Composition: Diversified investment portfolios typically encompass various asset classes such as stocks, bonds, real estate, and commodities, along with alternatives like private equity. These portfolios aim to spread risk by including a mix of these asset classes. The allocation within these classes is tailored to fit the investor's risk tolerance, investment goals, and time horizon. For instance, a younger investor with a higher risk appetite may allocate a significant portion to growth stocks, while an older, more conservative investor may lean towards bonds for stability.

Investment Behaviour During Market Volatility: Amid market volatility, investors often demonstrate varying responses. Some may succumb to panic and liquidate their investments, whereas others view it as a chance to purchase assets at discounted rates. Rational investors typically adhere to their long-term investment strategy, steering clear of impulsive decisions driven by short-term fluctuations. Nevertheless, emotions can cloud judgment, leading to irrational actions that could detrimentally affect investment returns.

Risk Perception and Attitude: Risk perception and tolerance vary among investors. While some individuals favour low-volatility investments with assured returns, even if they offer modest gains, others are more open to accepting greater volatility in pursuit of higher potential returns. Recognizing one's own risk perception and tolerance is crucial in crafting an investment portfolio that resonates with personal objectives and comfort levels.

Investment Horizon and Goals: An investor's investment horizon and goals significantly influence the selection of an appropriate investment strategy. Short-term goals like affording a vacation or preparing for a down payment on a house may call for a cautious strategy that prioritizes capital preservation. On the other hand, long-term objectives like saving for retirement or building wealth afford more leeway to undertake higher risk levels in pursuit of greater returns. Aligning the investment horizon and goals ensures that the portfolio is attuned to the timeframe for achieving financial aims.

Past Investment Performance: Past investment performance serves as a valuable yardstick for evaluating the efficacy of investment decisions and strategies. Delving into historical returns, volatility, and correlations with market movements enables investors to identify trends and patterns that can inform future investment choices. However, it's imperative to acknowledge that past performance doesn't guarantee future results, as other factors such as market conditions, economic outlook, and geopolitical events exert influence. Utilizing past investment performance as a reference rather than a certainty aids investors in making informed decisions and adjusting strategies accordingly.

Method: The DEMATEL method serves as a specialized approach for addressing specific problems characterized by interconnected issues. It involves identifying interdependencies among problems, establishing a hierarchical structure, and modelling potential solutions to create a workable system. The DEMATEL method contributes to a comprehensive understanding by utilizing directional charts and view charts. It finds application in various domains, including emergency management systems, where it integrates seamlessly with existing management practices. In this proposed method, the DEMATEL approach is employed to decompose fuzzy numbers, a step that was not explicitly required in prior methods [14]. The core principle of DEMATEL is fundamentally organized, constituting a method for visualizing and analysing complex issues systematically. This method employs structured modelling to address problems and generate solutions. The structured approach involves creating graphical representations that depict the interrelated relationships and factors among various elements. The visualization takes the form of a graph, Cause-and-episode between Explaining relationships systemic factors. Through analysis, these elements are categorized into causal groups, distinguishing between causes, groups, and outcomes. Particularly in the context of computer Components [15]. The DEMATEL method provides researchers with frameworks to better understand relationships, aiding in the resolution of intricate computer-related issues. When applied to benchmarking, this method effectively calculates relationships between effects, making it suitable for assessing complex systems with multiple components, such as sender-receiver systems. Furthermore, it offers a valuable tool for managing resources and planning implementations, allowing organizations to make optimal choices and address challenges effectively [16]. Decision-makers face the challenge of identifying potent constraints within the legal framework that exert a significant impact and may impede or influence their objectives. The confirmation of such constraints is crucial for devising strategies to minimize their effects. Both the ISM (Interpretive Structural Modeling) and DEMATEL methods provide results that are somewhat aligned in this context. When applied to the management of e-waste, the combination of ISM and DEMATEL results not only establishes a structural framework but also reveals the interactions among these obstacles. In essence, the combined findings not only highlight the structural aspects of the identified constraints but also shed light on the intricate web of relationships between them [17]. Consequently, an initial deficiency was identified in the DEMATEL approach, specifically within the first cluster. When comparing test makers' opinions on various topics, including the assignment of weights, it was discovered that they are now operating collaboratively as a team. Interestingly, mindfulness serves as a connection in decision-making, highlighting a shift in the team's approach. Evidently, the input of other test makers, believing that the widespread acceptance of their assessments is imminent [28]. The cumulative interplay among factors and the examination of their relationships, specifically their cause-and-effect dynamics, is commonly addressed using the DEMATEL approach for categorization. This method is widely acknowledged and embraced for its effectiveness. Consequently, each source considered in this article is regarded as a benchmark when deciding the source's influence. Employing DEMATEL, yielding

optimal results [19]. The propositions associated with bodies of evidence undergo transformation, and an Integrated Multi-Dimensional Decision Making (MCDM) approach is employed to assess the causation among criteria for evaluating an outreach worker program. In addition to fostering relationships, the DEMATEL technique is incorporated. This integration of DEMATEL and a newly introduced cluster-weighted system, encompassing a discussion system, serves as a comprehensive framework for a company. It aids in visualizing the intricate structure of relationships between criteria and is instrumental in measuring the influence of these criteria [20]. The current study is framed by the initial application of the DEMATEL technique and its foundational definition, marking the inception of this method. The original formulation of the DEMATEL method lacked a specific structure and was introduced without a clear framework. Advances in the DEMATEL technique have been proposed to address its undisclosed shortcomings and enhance its efficiency [21].

3. RESULT AND DISCUSSION

TABLE 1. A Study Examining the Risk Tolerance of Individual Investors

	Investment Portfolio Composition	**Investment Behavior During Market Volatility**	**Risk Perception and Attitude**	**Investment Horizon and Goals**	**Past Investment Performance**	**Sum**
Investment Portfolio Composition	0	15	10	18	14	57
Investment Behavior During Market Volatility	12	0	15	11	12	50
Risk Perception and Attitude	9	14	0	13	12	48
Investment Horizon and Goals	22	10	8	0	9	49
Past Investment Performance	13	14	11	13	0	51

Table 1 The provided table outlines the results of a study focusing on the risk tolerance of individual investors, with columns representing various factors such as Investment Portfolio Composition, Investment Behavior During Market Volatility, Risk Perception and Attitude, Investment Horizon and Goals, and Past Investment Performance. Each cell in the table represents a score indicating the relationship between two factors, with higher scores suggesting stronger correlations or influences. For instance, the score of 15 between Investment Behavior During Market Volatility and Investment Portfolio Composition indicates a notable connection between these two aspects. Overall, the study's findings suggest significant associations between different elements that contribute to individual investors' risk tolerance, providing valuable insights for investment decision-making processes.

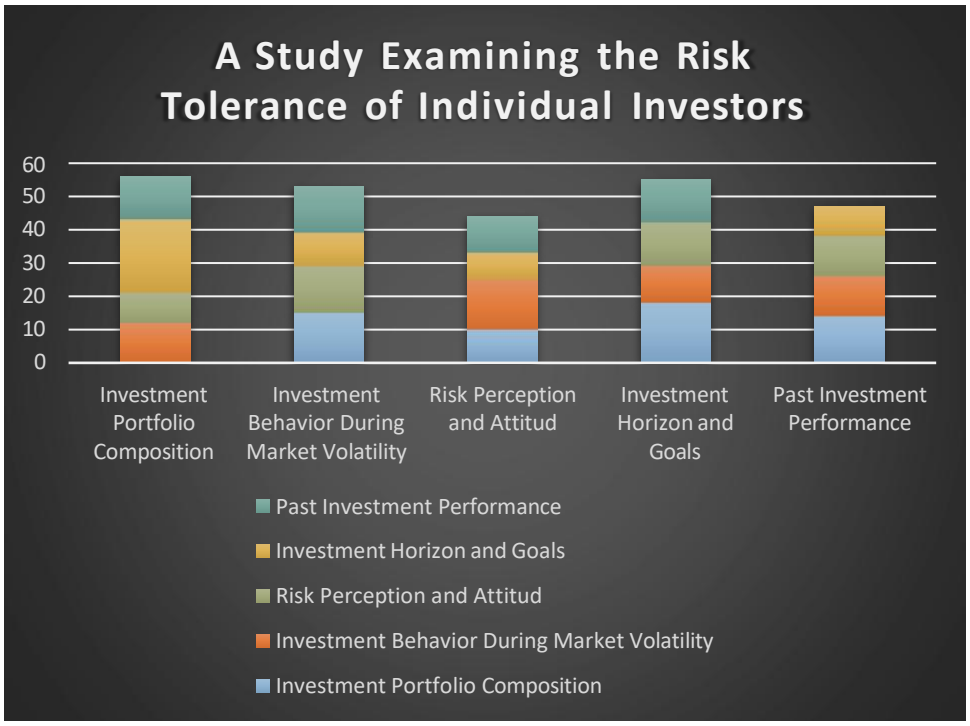

FIGURE 1. A Study Examining the Risk Tolerance of Individual Investors

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TABLE 2. Normalization of direct relation matrix

	Investment Portfolio Composition	**Investment Behavior During Market Volatility**	**Risk Perception and Attitude**	**Investment Horizon and Goals**	**Past Investment Performance**
Investment Portfolio Composition	0	0.263157895	0.1754386	0.315789474	0.245614035
Investment Behavior During Market Volatility	0.210526316	0	0.26315789	0.192982456	0.210526316
Risk Perception and Attitude	0.157894737	0.245614035	0	0.228070175	0.210526316
Investment Horizon and Goals	0.385964912	0.175438596	0.14035088	0	0.157894737

Past Investment Performance	0.228070175	0.245614035	0.19298246	0.228070175	0

Table 2 This normalized matrix ensures that the values in each row sum up to 1, facilitating comparison and analysis of the relationships between the criteria.

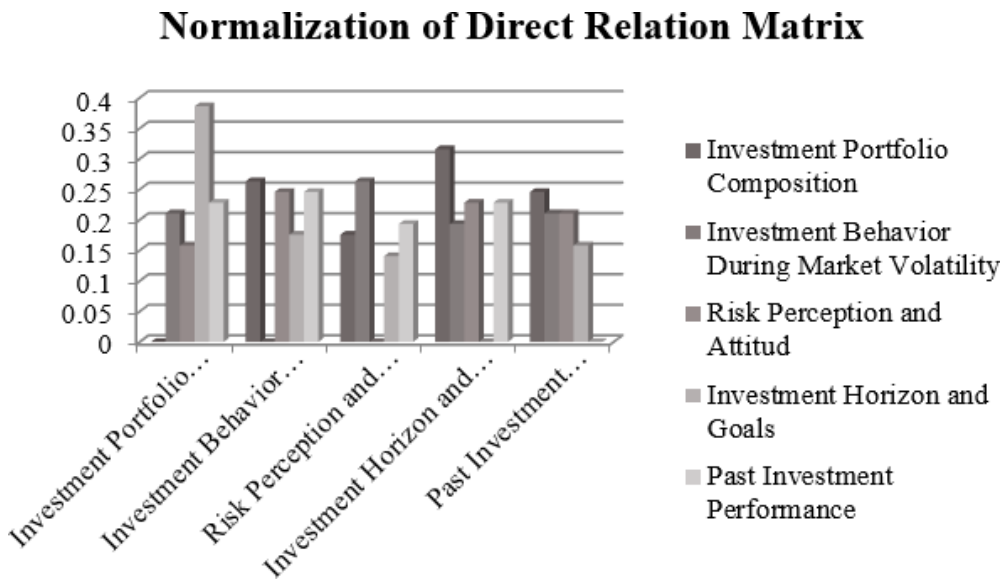

FIGURE 2. Normalization of direct relation matrix

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TABLE 3. Calculate the Total Relation Matrix

	Investment Portfolio Composition	**Investment Behavior During Market Volatility**	**Risk Perception and Attitude**	**Investment Horizon and Goals**	**Past Investment Performance**
Investment Portfolio Composition	0	0.263157895	0.175438596	0.315789474	0.24561404
Investment Behavior During Market Volatility	0.210526316	0	0.263157895	0.192982456	0.21052632
Risk Perception and attitude	0.157894737	0.245614035	0	0.228070175	0.21052632
Investment Horizon and Goals	0.385964912	0.175438596	0.140350877	0	0.15789474
Past Investment Performance	0.228070175	0.245614035	0.192982456	0.228070175	0

Table 3 Shows the Calculate the total relation matrix in shows that DEMATEL Decision making trail and evaluation laboratory in A Study Examining the Risk Tolerance of Individual Investors with respect to

Investment Portfolio Composition, Investment Behaviour During Market Volatility, Risk Perception and Attitude, Investment Horizon and Goals and Past Investment Performance is Calculate the Value.

TABLE 4. T= Y(I-Y)-1 I= Identity matrix

I				
1	0	0	0	0
0	1	0	0	0
0	0	1	0	0
0	0	0	1	0
0	0	0	0	1

Table 4 Shows the T= Y(I-Y)-1, I= Identity matrix in A Study Examining the Risk Tolerance of Individual Investors with respect to Investment Portfolio Composition, Investment Behaviour During Market Volatility, Risk Perception and Attitude, Investment Horizon and Goals and Past Investment Performance is the common Value.

TABLE 5. Y Value

Y				
0	0.263158	0.175439	0.315789	0.245614
0.210526	0	0.263158	0.192982	0.210526
0.157895	0.245614	0	0.22807	0.210526
0.385965	0.175439	0.140351	0	0.157895
0.22807	0.245614	0.192982	0.22807	0

Table 5 Shows the Y Value in A Study Examining the Risk Tolerance of Individual Investors to Investment Portfolio Composition, Investment Behaviour During Market Volatility, Risk Perception and Attitude, Investment Horizon and Goals and Past Investment Performance is the Calculate the total relation matrix Value and Y Value is the same value.

TABLE 6. I-Y Value

I-Y				
1	-0.26316	-0.17544	-0.31579	-0.24561
-0.21053	1	-0.26316	-0.19298	-0.21053
-0.15789	-0.24561	1	-0.22807	-0.21053
-0.38596	-0.17544	-0.14035	1	-0.15789
-0.22807	-0.24561	-0.19298	-0.22807	1

Table 6 Shows the I-Y Value a Study Examining the Risk Tolerance of Individual Investors with respect to Investment Portfolio Composition, Investment Behaviour During Market Volatility, Risk Perception and Attitude, Investment Horizon and Goals and Past Investment Performance table 4 T= Y(I-Y)-1, I= Identity matrix and table 5 Y Value Subtraction Value.

TABLE 7. (I-Y)-1 Value

(I-Y)-1				
2.917492745	2.000253	1.68644	2.108322	1.825616
1.879204549	2.607247	1.588181	1.831466	1.633986
1.787415573	1.74503	2.329297	1.792764	1.579835
2.011438238	1.764202	1.503909	2.684928	1.605997

1.930641013	1.835696	1.567216	1.889003	2.488859

Table 7 shows the (I-Y)-1 Value in A Study Examining the Risk Tolerance of Individual Investors with respect to Investment Portfolio Composition, Investment Behaviour During Market Volatility, Risk Perception and Attitude, Investment Horizon and Goals and Past Investment Performance Table 6 show the Minverse Value.

TABLE 8. Total Relation matrix (T)

	Total Relation matrix (T)					Ri
Investment Portfolio Composition	1.917492745	2.000253	1.68644	2.108322	1.825616	**9.538123**
Investment Behavior During Market Volatility	1.879204549	1.607247	1.588181	1.831466	1.633986	**8.540084**
Risk Perception and Attitud	1.787415573	1.74503	1.329297	1.792764	1.579835	**8.234341**
Investment Horizon and Goals	2.011438238	1.764202	1.503909	1.684928	1.605997	**8.570474**
Past Investment Performance	1.930641013	1.835696	1.567216	1.889003	1.488859	**8.711416**
Ci	**9.526192119**	**8.952428**	**7.675043**	**9.306483**	**8.134293**	

Table 8 indicates that the Total Relation Matrix results from the direct relation matrix being multiplied by the inverse of the subtraction of the direct relation matrix from the identity matrix.

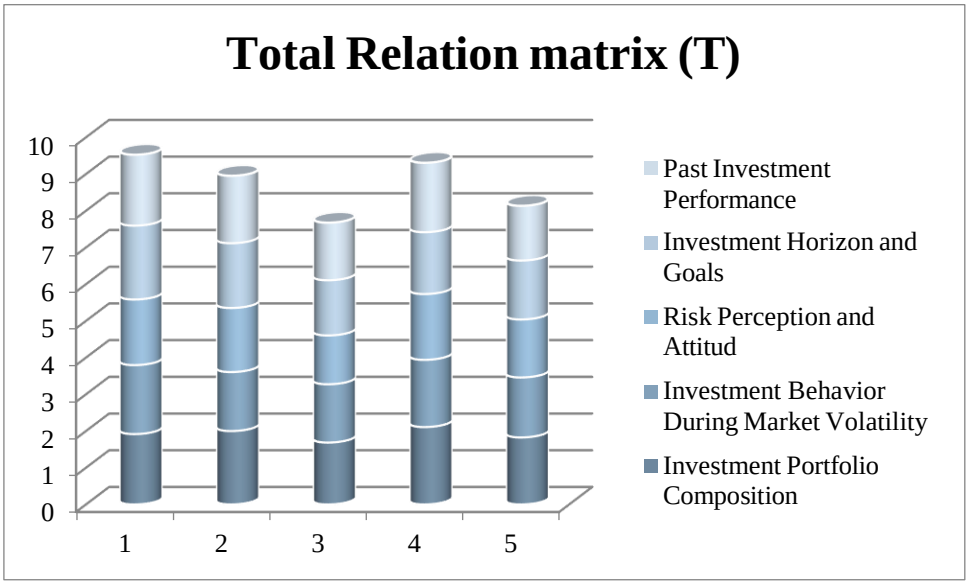

FIGURE 3. Total Relation Matrix

Figure 3 indicates that the Total Relation Matrix is obtained by multiplying the direct relation matrix with the inverse of the difference between the direct relation matrix and the identity matrix.

TABLE 9. A Study Examining the Risk Tolerance of Individual Investor Ri, Ci Value

	Ri	**Ci**
Investment Portfolio Composition	9.538123	9.526192
Investment Behavior During Market Volatility	8.540084	8.952428
Risk Perception and Attitude	8.234341	7.675043

Investment Horizon and Goals	8.570474	9.306483
Past Investment Performance	8.711416	8.134293

Table 9 reveals that in a study examining the risk tolerance of individual investors, the Ri value is highest for Investment Portfolio Composition and lowest for Risk Perception and Attitude. Additionally, the Ci value is highest for Investment Portfolio Composition and lowest for Risk Perception and Attitude.

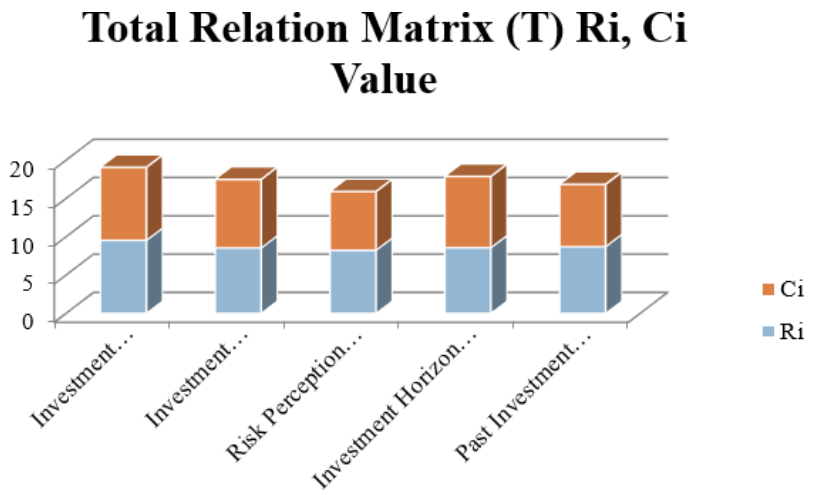

FIGURE 4. Total Relation Matrix (T) Ri, Ci Value

Figure 4 reveals that in a study examining the risk tolerance of individual investors, the Ri value is highest for Investment Portfolio Composition and lowest for Risk Perception and Attitude. Additionally, the Ci value is highest for Investment Portfolio Composition and lowest for Risk Perception and Attitude.

TABLE 10. Calculation of Ri+Ci and Ri-Ci To Get The Cause And Effect

	Ri+Ci	Ri-Ci	Rank	Identity
Investment Portfolio Composition	19.06431543	0.011931196	1	Cause
Investment Behavior During Market Volatility	17.49251238	-0.412343942	3	Effect
Risk Perception and Attitude	15.90938366	0.559298504	5	Cause
Investment Horizon and Goals	17.87695706	-0.736008793	2	Effect
Past Investment Performance	16.84570847	0.577123034	4	Cause

Table 10 shows the Calculation of Ri+Ci and Ri-Ci to Get the Cause and Effect. A Study Examining the Risk Tolerance of Individual Investors with respect to Investment Portfolio Composition, Investment Behaviour During Market Volatility, Risk Perception and Attitude, Investment Horizon and Goals and Past Investment Performance of Investment Portfolio Composition, Risk Perception and Attitude and Past Investment Performance is showing the highest Value of cause. Investment Behaviour During Market Volatility, Investment Horizon and Goals is Showing the lowest Value of effect.

TABLE 11. T Matrix Value

T Matrix					
Investment Portfolio Composition	**1.917493**	**2.000253**	**1.68644**	**2.108322**	**1.825616**
Investment Behavior During Market Volatility	**1.879205**	1.607247	1.588181	**1.831466**	1.633986
Risk Perception and Attitude	**1.787416**	**1.74503**	1.329297	**1.792764**	1.579835
Investment Horizon and Goals	**2.011438**	**1.764202**	1.503909	1.684928	1.605997
Past Investment Performance	**1.930641**	**1.835696**	1.567216	**1.889003**	1.488859

Table 11 T matrix values, of the matrix Calculate the mean, Threshold as 1.74377754 Determine the value (alpha). Exceeds the limit value any T matrix value will be thick.

FIGURE 6. Shown the Rank

Figure 6 In the DEMATEL-based ranking of A Study Examining the Risk Tolerance of Individual Investors, it is evident that Investment Portfolio Composition holds the top position in terms of significance, while Risk Perception and Attitude ranks at the bottom with the least value.

4. CONCLUSION

This research explores the complex realm of risk tolerance among individual investors, a pivotal facet of financial decision-making. Given the growing interest in personal finance and investment, comprehending investors' perspectives on risk holds significant importance for professionals and scholars alike. The study utilized a mixed-methods approach, integrating surveys and interviews to gather comprehensive data from a diverse array of individual investors. Through analysis, it aimed to discern the primary factors shaping risk tolerance, encompassing demographic variables, investment history, financial knowledge, psychological traits, and contextual influences. Additionally, the research delved into preferences influence investment choices and portfolio strategies. The results illuminate the nuanced dynamics of risk tolerance among individual investors, elucidating the interplay between various determinants and their impact on investment outcomes. Furthermore, the study enriches existing literature by providing insights into tailored risk management strategies aligned with the distinctive characteristics and preferences of individual investors. financial situation, investment objectives, knowledge of financial market, factors like experience, and emotional intelligence contribute to determining one's risk tolerance. A study investigating the correlation between age and risk tolerance, utilizing the proportion of risky assets within an individual's portfolio as a measure, revealed a tendency for risk tolerance to rise with age. However, the findings are constrained by limitations and may not fully encompass the influence of other sociodemographic variables. It's essential to acknowledge that although age may impact risk tolerance, other socioeconomic factors and personal values play significant roles in shaping an individual's investment decisions. Extroverts are characterized by sociability, warmth, and amiability, often prioritizing instinct over strict logic and acting impulsively due to their responsiveness to external stimuli. Unlike introverts, extroverts find risks appealing and are more inclined to take them, particularly in financial decision-making. The DEMATEL method contributes to a comprehensive understanding by utilizing directional charts and view charts. It finds application in various domains, including emergency management systems, where it integrates seamlessly with existing management practices. Investment Portfolio Composition, Investment Behaviour During Market Volatility, Risk Perception and Attitude, Investment Horizon and Goals and Past Investment Performance. the DEMATEL-based ranking of A Study Examining the Risk Tolerance of Individual Investors, it is evident that Investment Portfolio Composition holds the top position in terms of significance, while Risk Perception and Attitude ranks at the bottom with the least value.

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