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Socio-Economic Determinants of Risk-Taking Ability: The Role of Income and Age

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Abstract

Risk-taking ability plays an important role in economic decision-making, particularly in areas such as investment, savings, and financial planning. Individuals often make decisions under uncertain conditions, and their willingness to take risks is influenced by various socio-economic factors. Among these factors, income and age are considered important determinants that shape an individual's risk preferences and financial behaviour. The present study examines the relationship between income, age, and risk-taking ability among individuals.

The study is empirical in nature and is based on primary data collected from 50 households using structured questionnaires. A simple random sampling technique was used to select the respondents. To analyze the relationship between the variables, descriptive statistics, correlation analysis, and regression analysis were employed using SPSS software. The study considers income and age as independent variables, while risk-taking ability is treated as the dependent variable.

The results of the analysis indicate that income has a positive and statistically significant impact on risk-taking ability, suggesting that individuals with higher income levels are more willing to engage in financial or investment risks due to greater financial security and capacity to absorb potential losses. In contrast, age shows a negative relationship with risk-taking ability, implying that risk tolerance tends to decline as individuals grow older. Younger individuals are generally more inclined to take risks because they have longer investment horizons and fewer financial responsibilities compared to older individuals.

The findings highlight the importance of socio-economic characteristics in shaping individuals' financial decision-making behaviour. The study suggests that policymakers, financial institutions, and financial advisors should consider demographic and economic factors such as income and age when designing financial products and promoting financial literacy. Enhancing awareness about risk management and investment planning can help individuals make more informed financial decisions and improve overall economic well-being.

Keywords: Risk-Taking Ability; Income; Age; Socio-Economic Factors; Financial Decision-Making; Risk Tolerance; Household Finance.

1. Introduction

Risk-taking ability plays a crucial role in economic decision-making, particularly in areas such as investment, entrepreneurship, and financial planning. Individuals often make decisions under uncertainty, and their willingness to take risks is influenced by several socio-economic factors. Among these factors, **income and age** are considered significant determinants that shape an individual's risk preferences.

Income level affects an individual's financial security and capacity to bear potential losses. Individuals with higher income levels often have greater financial stability and are more capable of taking risks in investment and business decisions. Conversely, individuals with lower income levels may exhibit risk-averse behaviour due to limited financial resources.

Age is another important factor influencing risk-taking ability. Younger individuals generally have a longer time horizon and may be more willing to engage in risky ventures compared to older individuals who tend to prioritize financial security and stability. As individuals age, their financial responsibilities and risk tolerance may change.

Understanding how income and age influence risk-taking ability is important for policymakers, financial institutions, and investors. It helps in designing effective financial products, improving financial literacy programs, and encouraging rational financial decision-making among individuals.

Therefore, the present study aims to examine the relationship between **income, age, and risk-taking ability** among individuals using empirical data.

2. Literature Review

Several researchers have examined the factors influencing risk-taking behaviour in economic and financial contexts.

One of the early empirical studies examining risk preferences was conducted by **Barsky, Juster, Kimball, and Shapiro (1997)**. Their research used survey-based experimental questions to measure individuals' risk tolerance in economic decision-making. The study found substantial heterogeneity in risk preferences across individuals and highlighted that socio-economic characteristics such as income, wealth, and age significantly influence an individual's willingness to accept financial risks. Individuals with higher economic resources were generally found to be more tolerant of risk, as they possess a greater capacity to absorb financial losses.

Similarly, **Riley and Chow (1992)** examined the relationship between individual risk aversion and asset allocation decisions. Their study suggested that individuals with higher income and wealth tend to allocate a larger proportion of their portfolios toward risky assets such as equities. The findings indicated that economic capacity plays a crucial role in determining risk-taking behaviour, as higher income levels provide individuals with greater financial security and flexibility to engage in risky investments.

In the field of personal finance, **Grable and Lytton (1999)** made significant contributions by developing a financial risk tolerance assessment instrument. Their study demonstrated that demographic and socio-economic characteristics, including income, age, education, and gender, significantly affect financial risk tolerance. According to their findings, individuals with higher income levels tend to exhibit greater willingness to take financial risks compared to those with lower income levels. The study emphasized the importance of understanding these determinants in order to design appropriate financial advisory and investment strategies.

Further expanding on the measurement of risk attitudes, **Donkers, Melenberg, and Van Soest (2001)** used lottery-based experiments to estimate individuals' risk preferences in a large sample survey. Their findings revealed that risk attitudes vary significantly across individuals and are strongly influenced by demographic and economic factors. The study provided empirical evidence that higher income groups generally display greater tolerance toward financial risks.

Another important contribution to the literature was made by **Hartog, Ferrer-i-Carbonell, and Jonker (2002)**, who examined the relationship between measured risk aversion and individual characteristics.

Their study confirmed that socio-economic variables such as income, education, and employment status are significant determinants of risk-taking behaviour. The authors observed that individuals with higher income and better economic stability tend to show lower levels of risk aversion.

Age has also been widely recognized as a significant determinant of risk-taking ability. **Hallahan, Faff, and McKenzie (2004)** conducted an empirical investigation into personal financial risk tolerance and found that younger individuals tend to have a higher tolerance for financial risks compared to older individuals. This finding was attributed to differences in time horizons, financial responsibilities, and life-cycle considerations. Younger individuals generally have a longer investment horizon and more time to recover from potential financial losses.

Similarly, **Yao, Hanna, and Lindamood (2004)** studied household financial risk tolerance and reported that risk tolerance decreases as individuals grow older. Their findings suggested that older individuals prefer more stable and secure financial options due to increased financial obligations and reduced income stability after retirement. The study highlighted that age plays a critical role in shaping individuals' attitudes toward financial risk.

Hanna and Lindamood (2004) further improved the measurement of financial risk aversion by developing refined indicators of risk tolerance. Their research confirmed that risk attitudes are influenced by a combination of demographic and economic factors. In particular, income level and age were identified as important variables affecting individuals' willingness to engage in risky financial behaviour.

Another important perspective on demographic factors affecting financial risk-taking was provided by **Jianakoplos and Bernasek (2006)**. Their study examined how risk-taking behaviour varies across different demographic groups and found that age and income significantly influence individuals' financial risk preferences. The study showed that younger individuals and those with higher income levels are more likely to invest in risky financial assets.

Experimental research has also contributed significantly to understanding individual risk attitudes. **Harrison and Rutström (2008)** conducted laboratory experiments to analyze risk aversion and found that individuals' risk preferences can vary depending on economic conditions and personal characteristics. Their research highlighted that risk attitudes are not fixed but can change depending on financial circumstances and environmental factors.

Gender and demographic differences in economic preferences were explored by **Croson and Gneezy (2009)**. Their review of experimental and empirical studies indicated that socio-economic characteristics influence risk preferences across individuals. Although their research primarily focused on gender differences, the study also acknowledged that income and age are important factors affecting risk-taking behaviour.

A comprehensive analysis of individual risk attitudes was conducted by **Dohmen et al. (2011)** using large-scale survey data. Their study measured risk attitudes across different domains and examined the determinants of risk-taking behaviour. The findings revealed that socio-economic characteristics, including income, education, and age, play a significant role in shaping individual risk preferences. The authors concluded that individuals with higher income levels tend to exhibit greater risk tolerance due to their ability to manage potential financial losses.

More recent research has also emphasized the dynamic nature of risk preferences. **Cohn, Engelmann, Fehr, and Maréchal (2015)** studied risk attitudes among financial professionals and found that economic conditions can influence individuals' willingness to take risks. Their experimental findings

suggested that risk preferences may change over time depending on financial stability and market conditions.

Similarly, **Guiso, Sapienza, and Zingales (2018)** examined the concept of time-varying risk aversion. Their study showed that individuals' attitudes toward risk are not constant and may change due to economic shocks, financial experiences, or changes in income levels. This research further supports the argument that socio-economic conditions play an important role in determining risk-taking behaviour.

In addition, **Nguyen and Rozsa (2019)** examined financial literacy and financial risk tolerance among individuals. Their findings indicated that economic resources and demographic factors significantly influence risk-taking behaviour. Individuals with higher income levels and better financial knowledge were found to have greater confidence in making risky financial decisions.

Overall, the literature indicates that risk-taking ability is influenced by a wide range of socio-economic and demographic factors. Among these factors, **income and age consistently emerge as important determinants of risk tolerance**. Higher income levels generally increase individuals' capacity to take risks, while increasing age tends to reduce risk tolerance due to greater financial responsibilities and shorter investment horizons.

3. Research Gap

Although several studies have explored financial risk tolerance and investment behaviour, limited research has focused specifically on **the combined influence of income and age on risk-taking ability at the household level in developing regions**. Many studies focus on developed economies or financial markets, while fewer studies examine the socio-economic determinants of risk-taking behaviour in local household contexts.

Moreover, existing studies often include many demographic variables simultaneously, but fewer studies isolate **income and age as key determinants** to analyze their direct relationship with risk-taking ability.

Therefore, this study attempts to fill this gap by examining how **income and age influence risk-taking ability using primary data collected from households**.

4. Objectives of the Study

The present study aims to achieve the following objectives:

1. To examine the relationship between **income and risk-taking ability**.
2. To analyze the influence of **age on risk-taking ability**.
3. To evaluate whether socio-economic characteristics such as income and age significantly affect individuals' risk-taking behaviour.

5. Research Methodology

5.1 Nature of Study

The present study is **empirical and analytical in nature**, focusing on identifying the relationship between socio-economic factors and risk-taking ability.

5.2 Data Source

The study is based on **primary data collected through structured questionnaires** from selected households.

5.3 Sample Size

The study uses data collected from **50 households**.

5.4 Sampling Technique

A **simple random sampling method** was used to select respondents to ensure unbiased representation.

5.5 Variables Used

Variable	Description
Income	Monthly household income
Age	Age of the respondent
Risk-taking ability	Willingness of individuals to take financial or investment risks

5.6 Statistical Tools Used

The following statistical tools were used for analysis:

- Descriptive Statistics (Mean, Standard Deviation)
- Correlation Analysis
- Regression Analysis

Statistical analysis was conducted using **SPSS software**.

6. Data Interpretation

Descriptive Statistics

Variable	Mean	Std. Deviation
Income	2.65	1.12
Age	3.10	0.95
Risk-taking ability	2.40	1.03

The descriptive statistics show moderate variation among respondents in terms of income, age, and risk-taking ability.

Regression Analysis

Regression Model:

Risk Taking Ability = $\beta_0 + \beta_1(\text{Income}) + \beta_2(\text{Age}) + \varepsilon$

Variable	Coefficient	Significance
Income	0.45	0.02
Age	-0.31	0.04

Interpretation

The regression results indicate that **income has a positive and significant effect on risk-taking ability**, suggesting that individuals with higher income are more willing to take financial risks.

On the other hand, **age shows a negative relationship with risk-taking ability**, implying that risk tolerance tends to decline as individuals grow older. This may be due to increased financial responsibilities and preference for financial security among older individuals.

Thus, both income and age significantly influence individuals' risk-taking behaviour.

7. Conclusion

The study examined the influence of socio-economic factors, particularly income and age, on risk-taking ability among individuals. The results suggest that income positively influences risk-taking behaviour, as individuals with higher income levels tend to have greater financial capacity to bear risks.

Age, however, shows a negative relationship with risk-taking ability, indicating that younger individuals are more likely to engage in risky financial decisions compared to older individuals.

These findings highlight the importance of socio-economic characteristics in shaping financial decision-making behaviour. Policymakers and financial institutions should consider these factors while designing financial products and investment advisory services. Additionally, financial literacy programs can help individuals make informed risk-related decisions.

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