

COMPARATIVE RISK JUDGEMENT

SARC Research Proposal

Research Category: #3 Social Sciences & Education

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Research Topic: Thai Upper Secondary Students' Comparative Risk Judgement Across Investment Assets in a Digital Financial Media Environment

Abstract

This study examines how accurately Thai upper secondary students compare the relative risk of four common investment assets—bank deposits, bond mutual funds, stocks, and cryptocurrency—in a digital financial media environment. It addresses a gap in financial literacy research. Prior studies examine broad financial knowledge, attitudes, behaviour, and decision-making among young people, but fewer directly test whether adolescents can correctly distinguish relative risk across asset classes (Goyal & Kumar, 2021; Oberrauch et al., 2024). This matters because digital exposure may create familiarity with financial language without producing sound comparative judgement. The study will use a quantitative, cross-sectional survey with approximately 120–180 students. The instrument will measure background characteristics, basic risk-return knowledge, perceived risk ratings, and rank-order judgements. Instrument quality will be strengthened through content validation, pilot testing, and internal-consistency checks where applicable. Accuracy will be assessed using exact rank-order accuracy, pairwise comparison accuracy, and rating-distance scores. The findings can inform financial literacy education in Thai schools.

Introduction

Financial literacy refers to the ability to access, understand, compare, and apply financial information in decision-making. In Thailand, it remains an important policy concern, particularly as public education continues to emphasise risk, return, and responsible financial behaviour (Bank of Thailand, 2024). At the same time, adolescents are increasingly exposed to investment-related content through social media, online communities, and mobile applications, where financial terms such as stocks, cryptocurrency, and passive income circulate far more rapidly than formal classroom instruction. As a result, many students may become familiar with investment vocabulary before developing the judgement needed to assess volatility, uncertainty, and potential loss. This raises an important educational issue: surface familiarity with financial products may not translate into the ability to evaluate their relative risk accurately.

Literature Review

Existing scholarship has examined financial literacy mainly through broad domains such as knowledge, attitudes, behaviour, and financial education among children, adolescents, and young adults (Goyal & Kumar, 2021; Oberrauch et al., 2024). International evidence further shows that adolescents' financial literacy is shaped by family background, socio-economic conditions, and opportunities for financial learning at home and at school (OECD, 2024a, 2024b). Prior studies also suggest that financial literacy is associated with financial risk-taking and perceptions of financial products (Bannier & Neubert, 2016), including emerging assets such as cryptocurrency (Cascavilla, 2024). However, much of this literature measures financial literacy through broad indicators such as overall knowledge, confidence, attitudes, or self-reported behaviour. Less attention has been given to comparative risk judgement: whether students can correctly compare the risk level of different investment assets when they are placed side by side. This gap matters because adolescents may recognise financial terms such as “stocks” or “cryptocurrency” from digital media but still misjudge their relative risk. The present study addresses this gap by using rank-order and pairwise accuracy measures to examine whether Thai upper secondary students can distinguish the relative risk of four familiar asset classes in line with basic investment principles.

Research Objective and Question

This study aims to examine how accurately Thai upper secondary students evaluate the relative risk of bank deposits, bond mutual funds, stocks, and cryptocurrency. It also

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investigates whether accuracy differs by grade level, prior investment learning, source of financial information, and personal investment experience. Research question: To what extent do Thai upper secondary students evaluate the relative risk of bank deposits, bond mutual funds, stocks, and cryptocurrency in line with basic investment principles?

Methodology

This study will employ a quantitative, cross-sectional, school-based survey design. Participants will comprise approximately 120–180 Thai upper secondary students recruited through school access and convenience-based participation. The study aims to generate exploratory yet practically useful evidence from an accessible student sample rather than nationally representative estimates.

The questionnaire will contain four sections. Section 1 will collect background variables, including grade level, prior investment or financial-learning exposure, main source of financial information, and personal investment experience. These variables are included because differences in learning opportunity, media exposure, and product familiarity may shape students' financial judgement (OECD, 2024b). Section 2 will assess basic risk-return knowledge through short concept items on return, volatility, diversification, and loss potential. Section 3 will ask students to rate the perceived risk of each asset on a five-point scale. Section 4 will require students to rank the four assets from lowest to highest risk. For educational benchmarking, the expected risk order will be bank deposits, bond mutual funds, stocks, and cryptocurrency, consistent with introductory investment principles linking lower volatility and stronger capital protection with lower risk, and greater price fluctuation and uncertainty with higher risk (Bank of Thailand, 2024; The Stock Exchange of Thailand, 2023). This benchmark serves as a pedagogical reference rather than a claim that every product within each category carries identical real-world risk.

To strengthen instrument quality, the draft questionnaire will be reviewed by at least two experts in financial education, investment education, or adolescent survey design. A pilot test with 15–20 students outside the main sample will then assess item clarity, ambiguity, and task interpretation before revision.

The main dependent variable, comparative-risk judgement accuracy, will be measured in three ways: exact rank-order accuracy, pairwise comparison accuracy across six asset pairs, and rating-distance scores. Basic knowledge items will be summed into a short knowledge score, with internal consistency checked for the multi-item section.

Data analysis will include descriptive statistics, bivariate group comparisons, and multivariable analysis. Exact rank-order accuracy will be analysed using logistic regression, while pairwise accuracy and rating-distance scores will be analysed using regression models appropriate to data distribution. Participation will be voluntary, anonymous, and subject to school or teacher permission where appropriate.

Expected Contribution and Conclusion

This study shifts attention from broad financial literacy indicators to a more specific and measurable skill: comparative risk judgement across investment assets. It offers a practical assessment approach for detecting whether students understand relative investment risk beyond vocabulary familiarity or general confidence. Because adolescents increasingly encounter investment messages online before receiving structured instruction, the findings can help educators design clearer lessons on asset comparison, risk-return trade-offs, and responsible investing.

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