

THE INFLUENCE OF FINANCIAL LITERACY AND DIGITAL LITERACY ON RETAIL INVESTORS' INVESTMENT DECISIONS IN THE INDONESIAN CAPITAL MARKET

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ABSTRACT

The development of digital-based investment services has expanded retail investors' access to the capital market, but ease of access does not necessarily translate into the ability to make informed investment decisions. This study aims to analyze the influence of financial literacy and digital literacy on retail investors' investment decisions in the Indonesian capital market, both partially and simultaneously. Financial literacy is understood as knowledge and understanding of financial concepts that help individuals assess risk, return, diversification, and investment costs. Digital literacy refers to the ability to access, evaluate, and use digital information and services safely and critically. The study was designed using a quantitative explanatory approach through a survey of retail investors actively investing in the Indonesian capital market and using digital platforms. Data will be collected using a structured Likert-scale questionnaire and objective knowledge questions to measure financial literacy. Analysis can be performed using multiple linear regression or SEM-PLS depending on the characteristics of the instrument and measurement model. Because empirical data has not yet been included, this manuscript is a preliminary draft and does not present empirical test results or conclusions. The research is expected to contribute to the development of investor education that integrates financial literacy with digital skills.

Keywords: *financial literacy; digital literacy; investment decisions; retail investors; Indonesian capital market*

INTRODUCTION

Digitalization has transformed the way retail investors obtain information, open securities accounts, monitor portfolios, and conduct transactions. Investment apps and online information channels can reduce access barriers, but at the same time, investors face a vast amount of information, product promotions, digital security risks, and the potential for hasty decision-making. Therefore, the quality of investment decisions is not solely determined by the availability of technology; the ability to understand financial consequences and assess digital information also needs to be considered.

Financial literacy is a relevant competency for economic decision-making. Lusardi and Mitchell (2014) explain that financial knowledge is related to various important economic decisions, including household financial planning and choices. In the investment context, understanding risk and return, inflation, diversification, and transaction costs can help investors compare alternatives and assess the suitability of instruments to their goals and risk tolerance. However, knowledge alone does not always guarantee consistent behavior; decisions can also be influenced by experience, emotions, risk preferences, and the information environment.

On the other hand, today's investment decisions are often made through digital applications and sources. Digital literacy is not only about the ability to operate devices, but also encompasses information retrieval, source credibility evaluation, personal data protection, and responsible use of digital services. The OECD (2018, 2024) emphasizes the importance of the skills necessary for individuals to use digital financial services consciously and safely. Investors who can distinguish



official information from rumors, verify sources, and understand account security risks have the potential to improve their decision-making process.

While financial literacy and digital literacy are both relevant, they are distinct constructs. Financial literacy focuses on understanding financial concepts and risks, while digital literacy emphasizes the ability to interact with information and technology. Testing both variables in a single model can help clarify whether investment decisions are related to financial literacy, digital skills, or a combination of both. This study focuses on retail investors in the Indonesian capital market who use digital channels to obtain information or conduct transactions.

Based on this background, the objectives of this study are: (1) to analyze the influence of financial literacy on retail investors' investment decisions; (2) to analyze the influence of digital literacy on retail investors' investment decisions; and (3) to analyze the influence of financial literacy and digital literacy simultaneously on retail investors' investment decisions in the Indonesian capital market. The expected contribution is to provide an empirical basis for the development of investor education programs that not only discuss investment products and risks, but also evaluate digital information and security.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Financial Literacy

Financial literacy can be defined as the knowledge and understanding of financial concepts necessary to make informed financial choices. Lusardi and Mitchell (2014) review the importance of financial knowledge for economic decisions, while the OECD (2020) places knowledge, behavior, and attitudes as key dimensions within its financial literacy framework. In this study, financial literacy is operationalized primarily as knowledge relevant to investment decisions: understanding risk and return, diversification, inflation/time value of money, and instrument costs and characteristics. To avoid self-perception bias, measurement should combine objective questions with validated perception statements.

2.2. Digital Literacy

Digital literacy is the ability to use digital technology and information effectively, critically, and safely. In the investment context, this construct can include the ability to search for investment information, assess the credibility of sources, compare information from multiple channels, understand account security settings, maintain data confidentiality, and recognize suspicious links or offers. The OECD (2018, 2024) specifically emphasizes the competencies needed to use digital financial services safely and contribute to financial well-being. Therefore, instruments need to distinguish general digital literacy from the more specific digital financial literacy.

2.3. Investment Decisions

An investment decision is the process of selecting an investment instrument or action based on objectives, available information, liquidity needs, time horizon, and risk tolerance. In this study, investment decisions are measured through the quality of the decision-making process, including goal setting, consideration of risk and potential returns, use of relevant information, appropriate diversification, and pre-transaction evaluation. Indicators should measure the process and considerations, not assume that realized investment returns alone indicate good decisions.

2.4. Relationship between variables and hypotheses

Conceptually, financial literacy helps investors interpret instrument characteristics, assess risk-return trade-offs, and avoid fundamental portfolio management errors. Therefore, the better financial literacy, the more likely investors are to use relevant considerations when making investment decisions. This argument aligns with extensive research on the role of financial knowledge in economic decisions (Lusardi & Mitchell, 2014).

Digital literacy can help investors obtain information, assess the quality of sources, compare data, and maintain security when conducting transactions. These competencies have the potential to support more informed decision-making in an app-based investment environment. However, high digital literacy does not automatically guarantee optimal decisions; its impact needs to be empirically tested and may depend on the quality of information, experience, and investor characteristics.

Based on these arguments, the research hypothesis is formulated as follows:

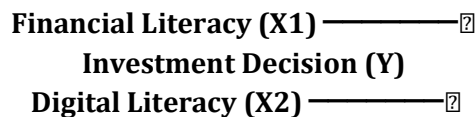
H1: Financial literacy has a positive influence on investment decisions of retail investors in the Indonesian capital market.

H2: Digital literacy has a positive influence on retail investors' investment decisions in the Indonesian capital market.

H3: Financial literacy and digital literacy simultaneously influence the investment decisions of retail investors in the Indonesian capital market.

Conceptual Framework

The research model places financial literacy (X1) and digital literacy (X2) as independent variables, while investment decisions (Y) as the dependent variable. The direction of the hypothesized relationship is $X1 \rightarrow Y$ and $X2 \rightarrow Y$. The simultaneous influence of both variables on Y is also tested. Control variables such as age, education, income, investment experience, transaction frequency, and duration of application use can be considered to make the main relationship estimation more measurable.



RESEARCH METHODS

4.1. Research Design

This research was designed as a quantitative explanatory study using a cross-sectional survey method. This design was used to examine the relationship between financial literacy, digital literacy, and investment decisions over a single data collection period. Because this design is observational, findings should be interpreted as statistical associations, not definitive evidence of causality.

4.2. Population and Sample

The target population is retail investors who invest in Indonesian capital market instruments, such as stocks, mutual funds, or other capital market instruments within the research

boundaries. Suggested inclusion criteria: (1) at least 18 years old; (2) have made investment transactions in the Indonesian capital market in the last 12 months; and (3) use applications or digital channels to obtain information or conduct transactions. Purposive sampling techniques can be used if a probability sampling frame is not available. Sample size should be determined based on model complexity, number of indicators, and statistical power analysis; do not set a final figure without methodological justification.

4.3. Data Collection Techniques

Primary data is collected through an online questionnaire. Before primary distribution, the instrument needs to be reviewed by experts and piloted on respondents with characteristics similar to the population. Participation must be voluntary, the purpose of the study must be explained, personal identification is not collected unless absolutely necessary, and the data is used solely for academic purposes. The questionnaire can include respondent profiles, financial knowledge questions, and statements about digital literacy and investment decisions.

4.4. Operationalization of Variables

The following table represents the initial draft of the indicators. The final indicators must be aligned with theory, expert review results, trials, and the target journal's requirements. For financial literacy, objective knowledge questions are preferred over simply asking respondents to self-assess.

Variables	Initial dimensions/indicators	Examples of measurement forms
Financial literacy (X1)	Risk-return; diversification; inflation/time value of money; costs and product characteristics	Knowledge questions with true/false/don't know answers; correct scores are summed.
Digital literacy (X2)	Information search; credibility evaluation; source comparison; account security; data protection	Likert scale statements 1–5, from strongly disagree to strongly agree
Investment decision (Y)	Goal setting; risk evaluation; use of information; timeframe suitability; diversification; pre-transaction evaluation	Likert scale 1–5 statements about decision processes and considerations

4.5. Data Analysis Techniques

The analysis begins with checking for data completeness, handling missing data, descriptive statistics, and respondent profiles. Using multiple linear regression, the basic model can be written as follows:

$$Y_i = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 Z_i + \epsilon_i$$

Description: Y is the investment decision score; X1 is financial literacy; X2 is digital literacy; Z is the set of control variables (if used); α is a constant; β is the regression coefficient; and ϵ is the error. The t-test is used to assess individual coefficients, while the F-test is used to assess the significance

of the model simultaneously. Report coefficients, confidence intervals, p-values, R^2 , and relevant model diagnostics.

SEM-PLS may be considered if the construct is measured through multiple indicators and the analysis objectives include evaluating both the measurement model and the structural model. In this option, researchers should report indicator/construct reliability, convergent and discriminant validity, collinearity, path coefficients, appropriate measures of relevance/prediction, and bootstrapping results. Choose one primary approach based on the objectives and data structure, rather than using multiple methods solely to find significant results.

4.6. Validity, Reliability, and Ethics

Content validity is determined through expert review; pilot testing can be used to verify the clarity of questions. In construct-based analysis, measurement reliability and validity need to be tested before hypotheses are interpreted. Respondents should be informed about the purpose of the study, confidentiality, voluntary nature, and the right to discontinue participation. Do not collect account numbers, passwords, PINs, or any irrelevant sensitive information.

RESULTS AND DISCUSSION

This section is intended as a framework and does not yet contain empirical results. Once the data is collected, present the number of respondents who meet the criteria, demographic characteristics, investment experience, and digital platform usage patterns. Next, report descriptive statistics and instrument quality test results. Hypothesis testing results should be presented as is, including coefficients that are insignificant or contradict the hypothesis.

The discussion should compare the results with theory and previous research, explain possible relationship mechanisms, and consider alternative explanations such as investment experience, access to information, income, risk tolerance, and behavioral biases. Avoid stating that a variable "causes" investment decisions if the research design is only a cross-sectional survey. Do not provide coefficient values, p-values, sample sizes, or conclusions before actual data analysis has been conducted.

CONCLUSIONS AND IMPLICATIONS

The final conclusion should address each objective and hypothesis based on the empirical results. Practical implications can be directed at strengthening investment education by integrating the concepts of risk and return, diversification, and investment costs with skills in verifying digital information and maintaining account security. Limitations that need to be addressed include the use of a non-probability sample, self-report-based measurement, cross-sectional design, and limited generalizability. This section should be updated as research results become available and should not be treated as proven findings.

BIBLIOGRAPHY

- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
- Organisation for Economic Co-operation and Development. (2018). G20/OECD-INFE policy guidance on digital financial literacy. OECD Publishing. <https://doi.org/10.1787/effe2693-en>

- Organisation for Economic Co-operation and Development. (2020). OECD/INFE 2020 international survey of adult financial literacy. OECD. <https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf>
- Organisation for Economic Co-operation and Development. (2022). OECD/INFE guidance on digital delivery of financial education. OECD Publishing. <https://doi.org/10.1787/c980ce2b-en>
- Organisation for Economic Co-operation and Development. (2024). OECD/INFE survey instrument to measure digital financial literacy. OECD Publishing. <https://doi.org/10.1787/548de821-en>

