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SINTA 2

# Improving Financial Literacy and Perception to Increase Public Involvement in Capital Markets: Evidence in West Java

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## ABSTRACT

The insufficient financial literacy of the Indonesian people causes low public involvement in the capital market; thus, this study seeks to build a capital market education model that can be a solution to this problem. The SEM-PLS technique was used to test hypotheses on 155 people from West Java. The findings of this study show that the financial literacy level of the Indonesian people is still very poor, their knowledge of investment and managing emergency funds is very restricted, and their lifestyle tends to be consumptive. Also, there is still a negative view of capital market perception, which makes people hesitant to join the market. In contrast to earlier research, this study proposes a novel capital market education model based on the findings of variable tests and indicators, with the expectation that it would be used to increase literacy and improve public perceptions of the capital market.

**Keywords:** capital market, financial literacy, financial inclusion, public perception

## INTRODUCTION

The development of Indonesian people's participation in the capital market is still comparatively slow. According to Kustodian Sentral Efek Indonesia (2022) data, 69.02% of investors are still concentrated on the island of Java. Sumatera accounting for only 16.80%, Kalimantan accounting for 5.48%, Sulawesi accounting for 4.34%, Bali accounting for NTT and NTB 3.36%, and Maluku and Papua accounting for 1.01%. Figure 1 depicts the number of Single Investor Identification (SID) in Indonesia, which increased dramatically between 2019 and 2022, demonstrating that Indonesians are increasingly interested in participating in the capital market. The increase of capital market investors is clearly linked to the involvement of the IDX and other capital market stakeholders in socialisation and education, although it should be noted that, despite continued growth, their proportion of Indonesia's overall population remains modest.

In 2022, there will be 8,103,795 capital market investors, or about 2.9% of Indonesia's total population. This figure remains higher than in prior years. Capital market investors were just 0.92% in 2019, increasing to 1.4% in 2020 and 2.7% in 2021. The rapid growth in the number of investors happened during the 2020 pandemic, at precisely 0.5% and 1.3% in 2021. Even though many educational programmes have been implemented by various parties, this increase will drop to 0.2% in 2022. This demonstrates the importance of determining the true cause of the problem to devise an effective solution to stimulate community participation in the Indonesian capital market.

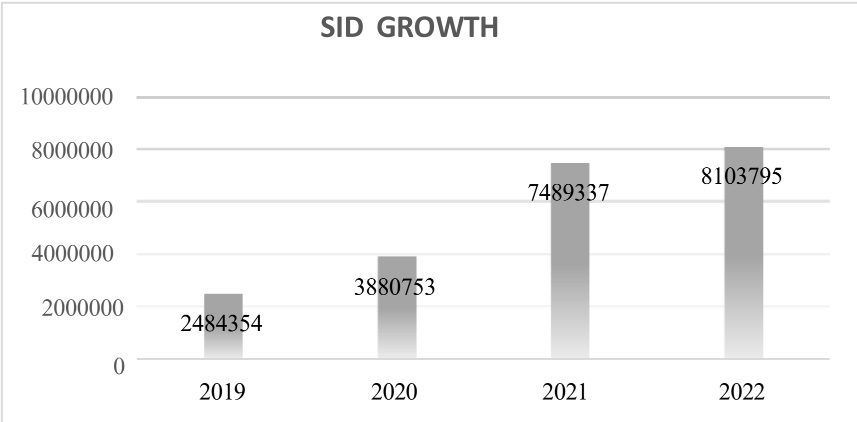


**Figure 1. Single Investor Identification (SID) Growth**
Source: Kustodian Sentral Efek Indonesia, 2022

A low level of literacy will certainly result in bad perceptions, prompting people to invest in alternative assets, such as gold, or just save. According to Zait & Bertea (2014), financial literacy is defined as "the ability to read, analyse, manage, and communicate personal finances that have an impact on material well-being" (Chen, H., & Volpe, 1998; Cude et al., 2006; Huston, 2010). People who lack financial literacy avoid riskier investments, such as the stock market. Understanding financial principles is critical for assisting someone in playing a role through investing (Faulcon Bowen, 2002). Understanding financial principles will assist a person in managing finances and making financial decisions in any economic situation (Remund, 2010). As a result, it is possible to conclude that a thorough comprehension of financial knowledge assists someone in making financial decisions and makes them more willing to accept risks when investing in capital market instruments.

Low financial literacy leads to negative public perceptions of risky investment instruments such as stocks. Cupák et al. (2022) revealed that a lack of risk knowledge discourages people from investing in hazardous assets, notably the stock market. Aren & Zengin (2016), found that investment quality is influenced by literacy level and risk perception. Furthermore, investor perceptions are more relevant than real economic uncertainty in motivating investment (Fang et al., 2020). According to Marfatia (2020), among other concerns, investors' perceptions of risk in stock investments have a substantial impact on stock performance. Loss risk is a risk that investors seriously consider (Huber et al., 2019), and it generates negative sentiment among investors, which can influence stock prices (Liu et al., 2022). Albu et al. (2015) demonstrate that consumer perceptions of capital market risk influence capital market investment performance. Marfatia (2020) stated that risk perceptions influence stock market transactions. Individual stock market participation is determined by the risk/reward trade-off desired (Merkoulova & Veld, 2022).

To address this issue, the involvement of BEI and other parties in educating the public is critical to increase capital market literacy and assist people in successfully investing in the capital market, thereby improving the public's negative perception of the capital market. Results of research (Li et al., 2020) Effective investment requires good literacy. Because they have better investment habits and are more risk-tolerant, investors with superior financial education are more likely to succeed in boosting their stock market returns. Financial education, according to Yong et al. (2023), can help less experienced investors and those from areas with lower levels of investor protection earn favourable returns on investments. If more investors maximise their gains from their investments, it will undoubtedly boost trust and reduce negative perceptions of stock investment, encouraging wider public engagement in the capital market (Merkoulova & Veld, 2022). The Financial Education Programme can enhance people's financial behaviour and boost their understanding (Kaiser et al., 2022). Apart from that, financial education, according to Boyd & Díez-Amigo (2023) helps disadvantaged individuals improve their lives, and financial education must begin at a young age (Wahyuni et al., 2023). Several other studies have emphasised the significance of financial literacy in motivating investors.(Aren & Zengin, 2016; Fernandes et al., 2014; Grohmann et al., 2018; Hung et al., 2011; Jalilvand et al., 2018; Karakurum-Ozdemir et al., 2019; Klapper & Lusardi, 2020; Lazarus, 2020). Furthermore, Ghafoori et al. (2021) indicated that financial education can improve positive financial behaviour.

Previous research has shown that financial literacy, perception, and capital market literacy are major factors influencing public engagement in the capital market. Financial literacy is divided into two categories: elementary and advanced. Capital markets are a critical component of advanced financial literacy. Based on this, this study would evaluate variables such as financial planning, capital market literacy, public perception, and capital market participation to identify the root causes of Indonesians' lack of engagement in the capital market. After assessing these variables, a capital market education model may be built and applied as a structured teaching model in Indonesian educational institutions; this model is the study's novelty.

## METHODS

In this study, four latent variables will be evaluated: financial literacy (X), capital market literacy ($Y_1$), public perception of the capital market ($Y_2$), and level of community participation in the capital market (Z) are the variables used in this study. The research model is depicted in as follows:

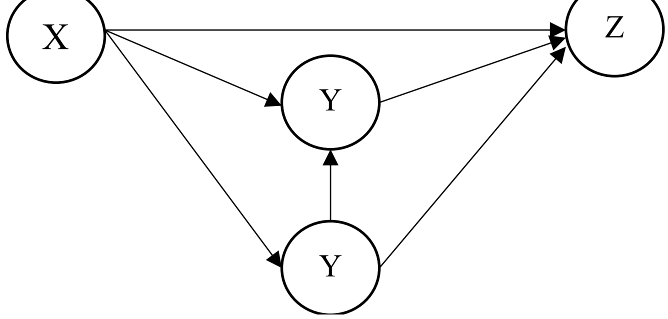


**Figure 2. Research Model**

Source: Authors, 2023

According to Hair et al. (2019), the sample size may be calculated using 5-10 times the highest number of indicators in a variable. Because this study contains a maximum of five indicators, the minimum sample size is 25-50 participants. However, the number of respondents for the research was set at 155. West Javanese people aged 17 to 55 years old were chosen as samples, based on the legal working age in Indonesia and the minimum age to create a capital market account. According to statistics from the Kustodian Sentral Efek Indonesia (KSEI), the West Java province was chosen as a sample because it has better infrastructure to support capital market transaction activity and the most investors in Indonesia.

**Table 1. Criteria for Sampling**

| Respondent's Age | Percent |
|---|---|
| 17-25 | 36.1 |
| 25-30 | 11 |
| 30-40 | 22.6 |
| 40-55 | 23.2 |
| >55 | 7.1 |
| Respondent's Field of Work | |
| Not yet working | 21.9 |
| Financial sector | 22.6 |
| non-financial sector | 55.5 |
| Respondent's Income Level | |
| 0 (no income) | 21.9 |
| < Rp 1.000.000 | 5.4 |
| Rp 1.000.000 – Rp 3.000.000 | 10.3 |
| Rp 3.000.000 - Rp 5.000.000 | 11 |
| Rp 5.000.000 - Rp 10.000.000 | 21.7 |
| Rp 10.000.000 – Rp 20.000.000 | 14.2 |
| > Rp 20.000.000 | 15.5 |

Source: Data processed, 2023

The SEM-PLS approach is used to evaluate hypotheses based on the research model. This approach was used since the investigation comprises latent variables, each with a broad collection of indicators (Memon et.al. 2021). Aside from that, SEM-PLS can be used to evaluate path models, deal with causal paths that connect predictors with paths, and deal with predictors that connect predictors with response variables.

## RESULT AND DISCUSSION

According to the survey results, the degree of public awareness of financial planning, the level of capital market knowledge, and the public's perception of the capital market are all very poor, resulting in limited participation in the capital market. The average value for each level of financial planning indicator is less than 3, indicating poor performance. Investment understanding has a score of 2.277 (bad). Understanding of emergency funds received a score of 2.216 (bad). Poor financial planning comprehension is becoming increasingly caused by consumerist lifestyles.

Poor financial literacy leads to poor capital market literacy and capital market investment perspectives. This is evident from the scores of each indicator, which are all in the 2 (bad) range; even the score for comprehending capital market transactions was 1.8 (very bad). Low literacy and perception levels are also associated with low levels of public engagement in the capital market. Each mark on the engagement variable has a score of around 1 (extremely bad).

**Table 2. Average Value of Each Indicator**

| Variable | Indicators | Value | Conclusion |
|---|---|---|---|
| **Level of Financial Literacy** | level of investment understanding | 2.277 | Bad |
| | understanding of emergency fund management | 2.216 | Bad |
| | level of lifestyle management understanding | 2.607 | Bad |
| **Capital Market Literacy** | Knowledge of capital market products | 2.374 | Bad |
| | Knowledge of analytical techniques | 2.032 | Bad |
| | Knowledge of transaction techniques | 1.8 | Very Bad |
| **Public Perception of the Capital Market** | confidence in the halal level of capital market investment | 2.511 | Bad |
| | Perception of profits from investment | 2.501 | Bad |
| | Perception of capital requirements | 2.478 | Bad |
| | Perception of product existence | 2.647 | Bad |
| | Perception of investment risk | 2.632 | Bad |
| **Level of Community Participation in the Capital Market** | Transaction Frequency | 1.632 | Very Bad |
| | Level of funds distributed to the capital market | 1.677 | Very Bad |

Assessment scale for each indicator 1-4: 1 = Very Bad; 2 = Bad; 3 = Good; 4 = Very Good
Source: Data processed, 2023

According to survey results, only 5.8% of respondents consistently set aside and understand emergency money; 32.92% set aside but not consistently; 49.67% have only ever set aside but are no longer setting aside; and 11.61% claimed to have never set aside an emergency fund and had never studied it. Only 7% completely comprehend investment, specifically those who learn it seriously and are committed to setting aside funds for investment on a regular basis, whereas 19.35% stated that they set aside investment funds but not on a regular basis, and 26.45% do not understand investment at all and have never set aside funds for investment. As many as 46.45% of respondents said they had previously saved money for investing but no longer do so.

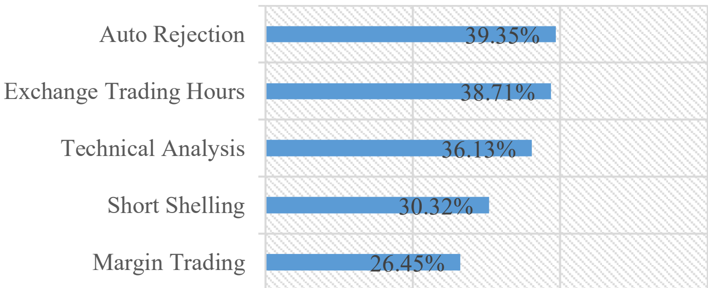


**Figure 3. Concept on Capital Market Literacy Material Was the Least Understood by Respondents**
Source**:** Data processed, 2023

Their lack of awareness of financial planning reduces their interest in learning about investing, particularly in the capital market. This is seen by the average capital market literacy score of only 2.338. The survey findings also revealed that 16.19% of respondents had a very low awareness of capital market transaction practices, while 59.36% had a very low comprehension of margin trading. Only 26.45% properly answered margin trading questions, and only 30.32% grasped the notion of short shelling; in all, only 38.71% were familiar with standard stock trading hours. Meanwhile, respondents' understanding of analytical methodologies was relatively limited; only 36.13% correctly answered very basic questions about technical analysis, and only 54.2% correctly answered basic questions about fundamental analysis. This reveals their lack of knowledge of the capital market, since many individuals are unfamiliar with the general and fundamental principles of the capital market, and their literacy level will decline if more advanced questions are asked.

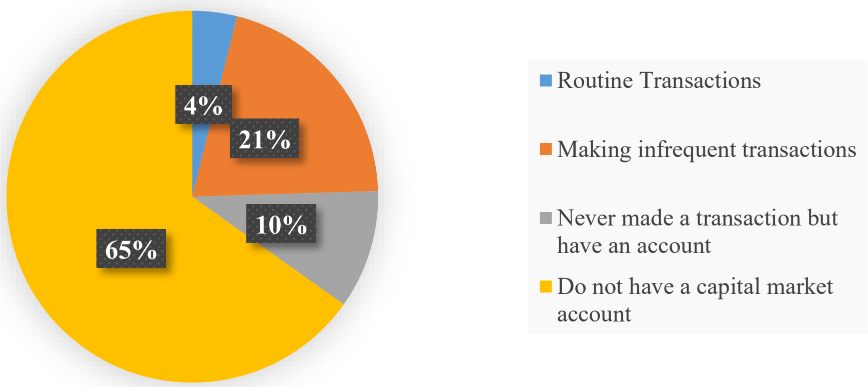


**Figure 4. Frequency of Respondents' Transactions in the Capital Market**
Source: Authors, 2023

Low community involvement in the capital market is caused by a lack of awareness of financial planning, which leads to a lack of knowledge about investing in the capital market. According to research, 65% of respondents do not have a capital market account, which means they never make any transactions; 10% have an account but never use it for transactions; and only 4% conduct regular capital market transactions. This statistic is consistent with IDX figures, which reveal that capital market investors account for just about 3% of Indonesia's total population. Thus, it is clear that the basis of the problem is Indonesian society's limited participation in the capital market, specifically a lack of understanding of investment and good financial planning. According to the study's findings, if income rises, 65.8% of respondents would like to save, 32.9% would prefer to invest, and 66.5% would avoid the capital market as an investment platform.This reinforces the public's negative perception of capital market investing.

According to the study's findings, 18.71% of respondents believe that investing in the capital market is extremely difficult to profit from, 47.74% believe that investing in the capital market requires a thorough understanding of various financial concepts as well as hard work to conduct analysis and monitoring, and only 10.32% believe that investing in the capital market is simple and can be done with small funds. According to Aren & Zengin (2016), Educational programs are necessary to influence investors' perceptions. Risk perception affects stock market transactions (Marfatia, 2020). Individual stock market participation is determined by the risk/reward trade-off desired (Merkoulova & Veld, 2022).

Investing in the stock market is not as tough as many people think; even those without a financial education may do it. There are several items that may be utilised as investment vehicles; however, investors must first determine their investment objectives and risk tolerance. Following the determination of the risk profile, investors can select assets that are appropriate for their risk profiles. According to Gui et.al ( 2021), someone who does not understand finance is more likely to buy financial products that are not suitable for their risk profile. If someone buys an investment instrument that is not appropriate for their risk profile, they will make poor decisions.

To determine a relationship between variables, the model must be tested. Validity and reliability tests must be performed before examining variable correlations. According Ghozali (2017), convergent validity (outer model) with a loading factor value ranging from 0.50 to 0.60 can be used to prove validity. According to the test results, there is one sign of financial planning comprehension (X1) with a value less than 0.5, which is investment understanding (X1.1). Meanwhile, there are three variables in the capital market public perception variable (Y2) with factor loading values less than 0.5, namely perception of capital needs (Y2.3), perception of product existence (Y2.4), and perception of risk (Y2.5); thus, these indicators must be disregarded.

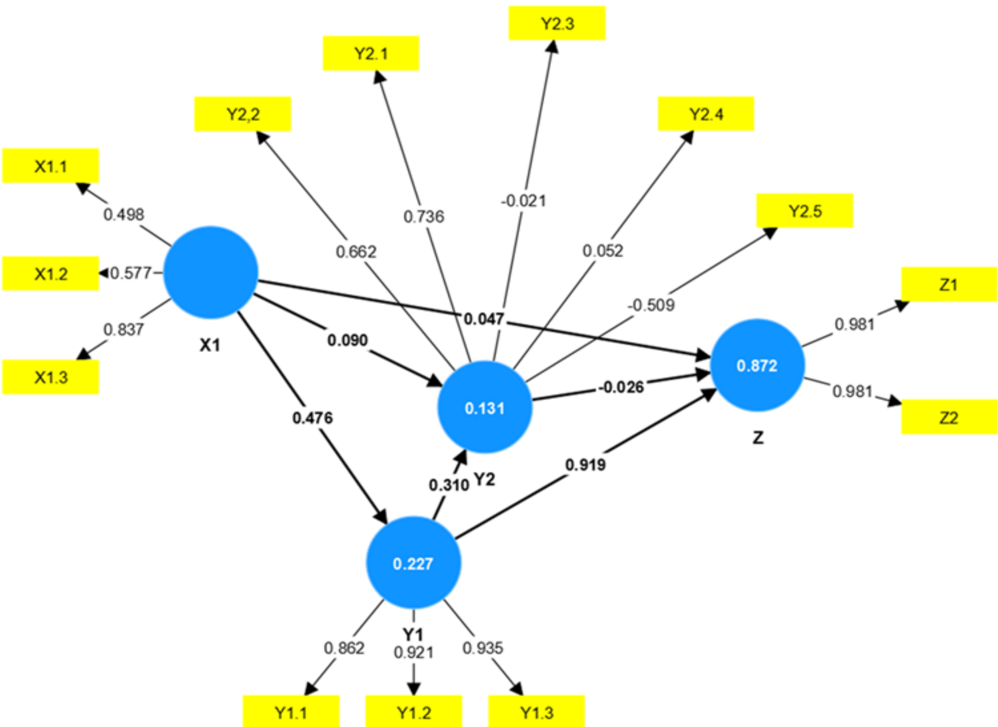


**Figure 5. Validity and Reliability Test Result**
Source: Data processed, 2023

The next step is to calculate the influence of each variable by excluding indicators with loading factor values less than 0.5. The results show that the outer model's P-value has a substantial impact, suggesting that all indicators can assess the variables. The study's findings demonstrate that the degree of financial planning (X) has a positive and significant relationship with capital market literacy (Y1), with a p value of 0.000, which is less than 0.05. Y1 has a significant beneficial influence on the amount of public participation in financial markets. The degree of financial planning has not been able to considerably improve the public impression of the capital market (Y2). However, a high level of capital market literacy will result in a favourable impression of the capital market.

**Table 3. Partial Test Results**

| | **Original sample (O)** | **Sample mean (M)** | **Standard deviation (STDEV)** | **T statistics (\|O/STDEV\|)** | **P values** |
|---|---|---|---|---|---|
| X1 -> Y1 | 0.451 | 0.459 | 0.068 | 6.593 | 0.000 |
| X1 -> Y2 | 0.060 | 0.074 | 0.109 | 0.551 | 0.582 |
| X1 -> Z | 0.045 | 0.036 | 0.041 | 1.084 | 0.279 |
| Y1 -> Y2 | 0.311 | 0.311 | 0.091 | 3.425 | 0.001 |
| Y1 -> Z | 0.924 | 0.926 | 0.027 | 34.628 | 0.000 |
| Y2 -> Z | -0.034 | 0.028 | 0.040 | 0.849 | 0.396 |

Source: Data processed, 2023

A Sobel test was performed to determine if boosting public financial awareness can drive the public to learn about capital market investing, hence increasing capital market inclusion. The findings indicate that financial literacy has a favourable influence on capital market literacy, which encourages the expansion of capital market participation, as indicated by a Zsobel value of 6.521, which is more than 1.96. Meanwhile, while financial education might improve attitudes, a positive view does not necessarily lead to stock market investment. A positive outlook must be accompanied by good financial and capital market expertise, which are required for capital market inclusion.

**Table 4. Indirect Test Results**

| | Variable correlation | Z Sobel Score | Conclusion |
|---|---|---|---|
| Hypothesis 1 | X1➔Y1➔Z | 6.521 | There is an influence of financial literacy on capital market inclusion through the capital market literacy variable |
| Hypothesis 2 | X1➔Y2➔Z | -0.462 | There is no influence of financial literacy on capital market inclusion through the variable public perception |

Source: Data processed, 2023

Comprehension of financial literacy remains poor; the average score on the investment comprehension level indicator is 2.27, suggesting that understanding of investment is deemed inadequate. The emergency fund indicator has a bad score of 2.16, as does the consumptive lifestyle management indicator with a score of 2.60. Many individuals still do not save for an emergency, do not distribute their income clearly and consistently, and are unsure of the percentages that should be allocated to investment, emergency money, and prudent spending. Most people believe they should spend first, then save or invest. To stimulate public engagement in the capital market, individuals must first be taught in personal finance so that they may comprehend investing and better their consumerist lifestyles. According to Yamori & Ueyama (2022), the level of financial literacy influences the level of capital market involvement. According to Zhao et al. (2023), increasing financial literacy among housewives encourages them to choose riskier liquid assets.

The study's findings indicate that financial education concentrated on capital market investment material is required to promote capital market literacy and perception, hence stimulating public involvement in the capital market. Agasisti *et.al* (2023) observed that financial education may stimulate the attention of someone who had previously been uninterested in financial products. Furthermore, persons with good financial literacy are more likely to build a more sophisticated investment portfolio.(Giofré, 2017).

To address this issue, related parties must strengthen capital market education programs in a structured and continuous way, according to the study's findings, which show that higher levels of financial literacy encourage people to learn about investment, including capital market investment. Previously, the team discovered a capital market education model that had a significant impact on encouraging increased community involvement, particularly among university students (Rinaldo & Puspita, 2023); In this study, the model was created to be applicable to all communities, including pupils with and without economic roots. The earlier two-level educational periods have been split into three levels under this model.

According to the study's findings, those with inadequate financial literacy lead a consumptive lifestyle and question the halalness of capital market assets, particularly equities. According to the findings of this study, only 29.03% of respondents feel that capital market investing is halal, 67.74% are unsure, and 1.2% believe it is haram. As a result, the first curriculum for the capital market education model focusses on lifestyle management, financial planning, and halal capital market investing.

Because most respondents are unfamiliar with capital market goods, how to create a capital market account, how to conduct transactions, and other essential capital market information, Stage 2 instructional material will focus on fundamental capital market investing principles. Furthermore, many individuals assume that in order to invest in the capital market, you must have a large quantity of money and a complete comprehension of advanced financial theory. As a regulator, the Indonesia Stock Exchange has historically required a minimum investment of IDR 100,000 ($6.4) to trade stocks in the capital market, as well as a minimum purchase of one lot of 100 shares to ensure that people from all socioeconomic levels may participate.

Next, the teaching materials in stage 2 will provide an analysis methodology that is easy for the general public to understand. Novice investors should initially focus on the company's high-demand goods in the market, typically owned by public companies, before introducing them to a straightforward transaction process. At this level, a basic financial analysis approach is also provided, which is based on simp.

We also discovered that respondents lack knowledge of technical and fundamental analysis techniques, as well as awareness of capital market investing strategies and terminologies used in capital market transactions; thus, at this level, the material studied will be more advanced, allowing them to survive in any situation. These resources concentrate on financial behaviour, which is critical for new investors to grasp because stock price fluctuations are impacted by both fundamental and non-fundamental factors. Liu et al. (2022) discovered that investor sentiment can be used to forecast stock prices. According toFang et al. (2020), investor behaviour is vital to watch in the realm of investment. The final item in the model is stock transaction practices, which are the respondents' inadequacies in this study.

Level 3 also contains technical analysis with many indicators, advanced fundamental analysis, investment strategies for both normal and crisis conditions, and stock transaction simulations based on advanced level analysis results. It is expected that this instructional methodology will improve the efficacy of the Indonesian stock exchange's teaching programs. Several previous study findings have shown the importance of education programs in fostering investor excitement. Kimiyaghalam & Yap (2017) argue that financial education for Malaysian youth is critical to grow income and have effective financial management. People are hedonistic, which causes them to adopt shopping patterns that do not suit their requirements or income, trapping many of them in consumerism. According to data from the Financial Services Authority (OJK), the national value of online loans bad credit reached IDR 1.73 trillion in the June 2023 quarter. When we break it down by age group, we see that the 19–34-year age range contributes the most to online loans negative credit with the accumulated default amount. reached IDR 763.65 billion, accounting for 44.14% of total national bad debts (Financial Services Authority, 2023). Figure 6 depicts the most recent model of capital market education, which developed from the prior model of capital market education.

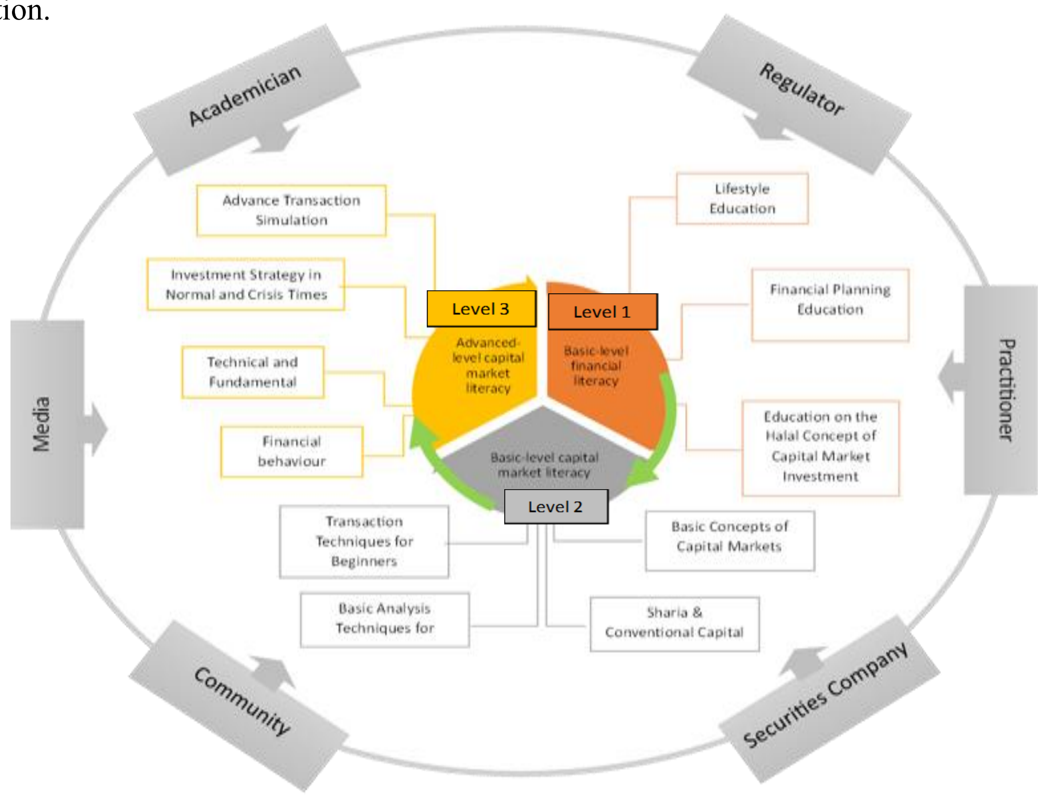


**Figure 6. The Capital Market Education Model Has Been Developed Based On Research Findings**

Source: Authors, 2023

This is seen to be crucial, particularly for investment learning materials during a crisis, because the study's findings indicate that many consumers still prioritise consumption above investment. This attitude encourages people to spend a lot of their income on consumption, with the remainder saved or invested, leaving no money for investment or emergency finances. This obviously has a negative impact when an unforeseen occurrence happens, such as COVID-19. Mohd Daud et al. (2023) discovered that healthy financial behaviour can help reduce financial vulnerabilities. And strong financial understanding shapes behaviour as well (Nga, 2020).

It is also conceivable for regulators to partner with various universities in the implementation of structured education programmes. Pan et al. (2020) stated the necessity of education for everyone, from financial advisors to housewives, in order to stimulate their participation in the capital market. According to research by Chen et al. (2023), individuals with high financial literacy are more likely to be interested in investing in stocks. Individuals with good financial understanding are more willing to accept risks, which opens up more options for them to participate in capital markets with a relatively high level of risk (Molina-García et al., 2023). The technical application of the capital-intensive education model in higher education is depicted in Figure 7. that explains the process and the impact on the parties engaged in putting this educational model in place.

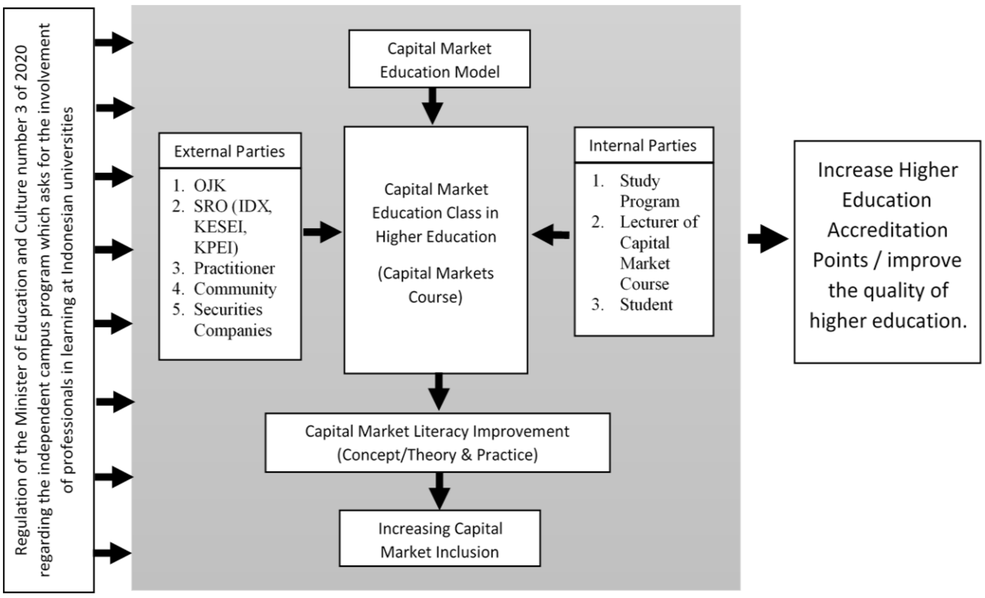


**Figure 7. Technical Implementation of the Capital Market Education Model in Higher Education**

Source : Authors, 2023

Universities may organise pursuit team classes. The course will be taught by two people: the lecturer and a capital market practitioner. This program will provide students with a more interesting and practical classroom learning experience. Teachers who are well-versed in finance will have a positive influence on financial education initiatives. (Compen et al., 2019; Urban et al., 2020). A good educational programme will undoubtedly aid them in future money management. Cupák et al. (2022) discovered that investors with a high degree of financial literacy will be more successful in capital market investing; (Zhang et al. 2021) discovered the value of education in making smart financial judgements during times of crisis. Hermansson et al. (2022) discovered that media and literacy levels play an essential role in increasing public engagement in the capital market. Yong et al. (2023) also said that more financially knowledgeable investors will make more money while investing in stocks. Financial literacy will assist investors in analysing financial assets and is particularly successful in assisting young investors in making more lucrative investments (Li et al., 2020). Aside from that, it will be quite advantageous for universities to meet the accrediting indications, specifically teaching practitioners. Furthermore, increased public engagement in the capital market will help the Indonesian economy (Kim et al., 2018; Ozili, 2018). The government's participation is also critical in providing investors with investment security guarantees, ensuring that investor confidence in the capital market is high (Prihandono, 2014).

## CONCLUSIONS

The results of the study show that a strong understanding of financial planning will motivate someone to study the capital market because the concept of financial planning includes allocating cash for investment purposes. As a result, everyone will research various types of investments, including the capital market. which leads to increased individual participation in the stock market. Positive individual perceptions of capital market investment can be created through good financial literacy, but it is not yet capable of encouraging the creation of capital market inclusion; in other words, creating a positive perception of society is insufficient to make society invest; positive perceptions must be balanced with good capital market literacy to create capital market inclusion. As a consequence, the capital market education model provided in this study might be used as a reference by all stakeholders to increase Indonesian capital market literacy.

Furthermore, coordination with other institutions is essential to ensure that the capital market education model, which is original to this research, is integrated into university learning processes. The educational program is organised into three stages: planning, implementation, and assessment, making it more structured. This study did not go into detail on the regulation or products of the Indonesian capital market; however, it is obvious that legislative changes and product innovation are necessary to make it more accessible and acceptable.

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