**Did Financial Literacy Enhance Market Discipline on Public Banks?  
(Evidence from Indonesia)**

The purpose of this study is to empirically examine the extent to which depositors’ financial literacy increased the effectiveness of discipline at commercial banks in Indonesia. High levels of financial literacy among consumers have an impact on the effectiveness of market discipline. The effectiveness of market discipline and financial literacy became a challenge in various countries after the 2008 global financial crisis. It is intriguing to study the effectiveness of market discipline and financial literacy empirically using explanatory research studies with a quantitative approach. The data used in this study were collected using survey methods. The questionnaires used in this study were distributed using the purposive random sampling method and as many as 408 complete and valid questionnaires were used in this study. The multivariate analysis method used in this study is the Structural Equation Modeling (SEM). This research proves that financial knowledge, financial skills, and financial behavior can significantly improve the performance of market discipline. The higher the depositors’ financial literacy, the higher effectiveness of discipline at commercial banks in Indonesia. This study also proves that financial behavior is a mediation in the relationship of financial skills and financial knowledge to the market discipline. The results of this study provide recommendations for regulators, practitioners, academics, and depositors who are actors in the financial industry that need to empower consumers with financial literacy and promote market discipline to realize the importance of these two aspects for the sustainability of financial stability. This research is also developed on different types of depositors’ objects and it is developing other financial literacy variables that have not been used in this study, such as financial decisions, financial goals or financial experience, financial awareness, and financial capability.

**Introduction**

Market discipline has an important role in maintaining financial stability. Disturbances in financial stability can be known, for instance, through economic indicators such as inflation. What is the role of market discipline to anticipate financial instability? Crockett (2003) stated that inflation is a symptom of the lack of market role in disciplining financial institutions. Market discipline displays the ability of internal and external governance of financial institutions in a free market economy without any intervention from the government as a policymaker and financial institution supervisor (Crockett; 2003). This opinion is consistent with the Basel III agreement that market discipline has a role as a supervisor of financial institutions. A question then arises, who plays a role in disciplining these financial institutions and how does the market discipline mechanism work? In principle, various economic actors can apply market disciplines, such as supervisory agencies, rating agencies, market traders, shareholders or equity holders, the board of directors, subordinated debt-holders, depositors, managers, borrowers, employees; or known as the Stakeholder Monitor (SHMs) concept (De Ceuster and Masschelein, 2003; Llewellyn and Mayes, 2003; Llewellyn, 2005). This opinion is consistent with Eling and Schmit (2012) who stated that investors are one of the stakeholders that can influence the effectiveness of market discipline. This statement also aligns with Mantripragada (1992); Flannery (1998), who argued that depositors or investors as market discipline actors can play a role in disciplining the market and behave rationally when the intermediary institutions face the problem of solvency. Hess and Feng, (2005); (2007); Kozłowski (2016) and Soma el al. (2016) empirically proved that the depositor can discipline the market in non-bank financial institutions. Eling and Schmit, (2012) also proved that market discipline occurs in insurance companies. Meanwhile, Francis et al. (2019) found that other market players, such as the subordinated debt holder, played a role in disciplining the banking institutions' markets through their study of the bank to bank loan actors.

How do these market participants discipline financial institutions? Bliss and Flannery (2002) explained that market participants discipline the market through monitoring and influencing mechanisms. Monitoring conducted by investors becomes a market signal and is responded by managers of financial institutions by making price changes on deposits or securities to show that the company does not engage in adverse activities or decision-making. Negative market signals indicate that investors want management to make changes, while positive signals indicate the opposite. Market discipline provides an understanding of two very different meanings: the ability of investors to monitor the actual condition of financial companies and the ability of investors to influence managerial actions properly. Both of these mechanisms are carried out to help control the risk-taking of bank institutions. This opinion was also conveyed by Flannery (1998); Park and Peristiani (1998), stating that the mechanism of market discipline by depositors can force the management of financial institutions to reduce risk-taking. The results of empirical studies conducted by Martinez Peria and Schmukler (2001), Santos (2001), Caprio and Honohon (2004), Levy-Yeyati et al. (2004a), Hosono et al. (2005), Karas et al. (2006), Murata and Hori (2006), Romera and Tabak (2010) stated that market discipline is effective in preventing excessive risk-taking. Whereas Hall et al. (2002), Valence (2005), and VanHoose’s (2007) findings are contrary to previous opinions that stated market discipline is still considered weak in its role as a pillar of banking supervision. This is because the behavior of depositors in disciplining the market is less effective in preventing the behavior of banks and financial institutions in taking high risks. This difference of opinion shows that market discipline has not been proven to be consistent in the role of preventing excessive risk-taking by financial institutions. The public is still too easily tempted by the results of large investments promised, does not consider risk factors, and does not take probability into account.

Based on previous research studies, the performance of market discipline is influenced by various factors, such as government regulation (Levy-Yeyati et al., 2004a); deposit insurance (Aysan et al., 2017; Angkinand and Wihlborg, 2010; Baer and Brewer, 1986; Castagnolo and Ferro, 2013; Diamond and Dybvig, 1983; Gilbert, 1990; Golberg and Hudgins (1996); (2002); Gropp and Vesala, 2004; Kouassi et al., 2011; Ioannidau and Dreu, 2006; Merton, 1977; Omet et al., 2008; Pecchenino, 1992, Shiers, 1994 and Schich, 2008); Demirguc-Kunt and Huizinga (2004), Ioannidou and Dreu (2006), Martinez-Peria and Schmukler, 2001; Schmukler and Peria, 2001), macroeconomic conditions (Levy-Yeyati et al., 2004a), institutional factors (Levy-Yeyati et al., 2004a), systemic risk (Levy-Yeyati et al., 2004a). Trinugroho et al. (2020) stated that the level of macro and micro risk becomes the consideration of depositors to discipline banks. The type of bank ownership is also important in explaining differences in the market discipline by depositors, large uninsured depositors are more effective in disciplining banks. Until now, there is still debate over the effectiveness of the disciplined market, showing that these factors have not been consistent as anti-disciplinary market discipline. Other factors still need to be studied for the effectiveness of market discipline to be realized. Financial literacy factors can be considered as one of the factors that play a role in improving the mechanism of realized market discipline.

Widdowson and Hailwood (2007) argued that people with a high level of financial literacy can apply stronger market discipline to financial services by exercising greater oversight of the risks of certain financial institutions and their products. In turn, strong market discipline will encourage prudent risk management and higher financial service standards. This was proven by Soma et al. (2016) who explained that financial literacy affects market discipline in non-bank financial institutions, a study of depositors who are employees and retirees of a company in West Java, Indonesia. The limited empirical study that examines the extent to which the depositor's financial literacy level affects the increase in discipline effectiveness is one of the reasons for conducting this study. This study was conducted to develop financial literacy models with market discipline in bank financial institutions. This study was conducted at the depositors of commercial banks in Indonesia. The financial literacy factor was raised as an antecedent’s market discipline, seeing that the country used in this study was a developing country, where the issue of financial literacy is still a challenge that needs to be continually reviewed and improved. This was discovered after the momentum of the crisis that struck many countries in the world, one of which was Indonesia, while the dynamic development of the financial industry does not deny encouraging financial industry players to continue to innovate the best financial products and services for consumers. The financial literacy factor is thought to be one of the antecedents to improve the effectiveness of market discipline in the context of behavioral research. Efforts to maintain financial stability require—not only the role of regulators—but also market players to monitor the performance of financial institutions through market discipline.

**Literature Review**

**Financial Literacy**

After the 2008 financial crisis, financial literacy became one of the factors of financial instability and a global problem that must be addressed (Tschache, 2009; Lusardi and Mitchell, 2014; Priyadharshini, 2017). Financial literacy also has an important role in influencing financial institutions in managing businesses and products offered to depositors. The importance of financial literacy’s role for individuals as investors in making financial decisions, and for financial institutions in determining risk profiles in managing investor funds, will ultimately have implications for the level of economic growth and stability of a country (Widdowson and Hailwood, 2007; Sarigul, 2014). The concept of financial literacy is measured and defined through different variables. Hung et al. (2009) proposed the concept of financial literacy consisting of financial knowledge, perceived knowledge, financial skills, and financial behavior. OECD (2011) defined financial literacy as a combination of awareness, knowledge, skills, attitudes, and behavior. This opinion was further developed by Atkinson and Messy (2012) who defined financial literacy as awareness, knowledge, skills, attitudes, and behavior. Meanwhile, Lusardi and Mitchel (2013); Xiao et al. (2014) stated that financial literacy is a unity of knowledge, skills, attitudes, all of which affect a person's financial behavior. The Financial Services Authority (2016) also defined financial literacy as a series of processes or activities to increase the knowledge, beliefs, skills of consumers and the wider community, so that they can manage finances well. Based on these opinions, it is known that various studies on financial literacy defined this concept differently and verified using different methods. The conceptualization of financial literacy is used in this article, assuming that financial literacy consists of knowledge, financial skills, and financial behavior. Empirically, the relationship between financial literacy variables has been proven to be significant by Mountain et al. (2020).

**Market Discipline**

Market discipline is used to control the risk of bank financial institutions through the actions of investors, signaling increased bank risk through a withdrawal of deposit funds and asking for higher returns (Min, 2015). The effectiveness of the market discipline has been reviewed in various subsectors in the financial services industry. Market discipline works effectively in the insurance sector in developed countries (Eling and Schmit; 2012). Meanwhile, in the banking industry, it was found that market discipline as a pillar Basel III framework was proven working effectively in the banking sector (Afzal et al., 2011). Market discipline performance can be useful to 1). reduce the cost of bank supervision when the regulation of financial institution supervision is completed by the market discipline; 2). improve efficiency by forcing inefficient financial institutions to be efficient or to quit the system; 3). punish banks that take an excessive risk by paying higher risk premiums to depositors, increasing the cost of deposits acts as a penalty for banks that take excessive risk. Although market discipline was originally a framework for banking, this study has been carried out in various financial service sectors such as the banking sector (Valensi, 2006; Afzal et al., 2011); insurance (Eling and Schmit, 2012; Castagnolo and Ferro, 2013); cooperatives (Hes and Feng; 2012); mutual fund (); and Islamic banking (Aysan et al., 2017). The results of these studies are also still an on-going debate to this day. Aysan et al. (2017) stated that market discipline is effective in disciplining the market in the Islamic banking industry, while Eling and Schmit (2012) showed that the German insurance market displays the existence of such discipline, even though the actual effect appears smaller than previously found in the US insurance market. Market discipline works effectively in the insurance sector in developed countries (Eling and Schmit; 2012). Meanwhile, Castagnolo and Ferro (2013); Andrievskaya, and Semenova (2015) stated that market discipline is effective in periods of a financial crisis. Studies on market discipline have been carried out in various countries in developing countries: Pakistan (Afzal et al., 2011); and Indonesia (Valensi, 2006; Febrian and Myra, 2011; Aysen et al., 2017; Trinugroho et al., 2020). The next interesting question that arises is how do economic agents discipline the market? Market discipline theory predicts that when there is excessive risk-taking, depositors will ask for higher returns on their deposits or withdraw their funds (Aysan et al, 2017) (Llewellyn, 2005). A monitoring process that works well by market participants, such as depositors, will have an impact on changes in actions by market participants in the event of excessive risk-taking by agents, like managers of financial institutions asking for higher returns or transferring their savings. This signal is then responded by the manager through making improvements like lowering the risk profile. This mechanism is known as the monitoring and influence process, which is an act of market discipline that is developed continuously by researchers, such as Park and Peristiani (1998); Bliss and Flannery (2002), Flannery and Nikolova (2003), Hamalainen et al (2005), Hess and Feng (2005), (2007), Llwellyn (2005). The very dynamic development of the financial sector along with the increased risks in the financial sector raises concerns about the financial sector's supervision and regulatory systems. This has come to the attention of users of market discipline to complete the supervision of the financial sector in managing risk. Market discipline can contribute to reducing the probability of failure of financial institutions and minimizing the cost of failure that occurs (Llewellyn and Mayes, 2003; Llewellyn, 2005). Research examining market discipline in the financial industry during crisis periods have been carried out in various developed and developing countries such as Cubillas et al. (2012), Berger and Ariss (2015), Schumacher (2000), Martinez-Peria and Schmukler (2001). Meanwhile, research examining market effectiveness in disciplining financial institutions related to risk management was conducted by Soma et al. (2016), Stainer and Barajas (2000), Valence (2005), VanHoose (2007). Various prerequisites and supporting factors are needed so that market discipline can be achieved (Llewellyn and Mayes, 2003; Levy-Yeyati et al, 2004a; 2004b; Llwellyn, 2005). Not only economic conditions, but other preconditions are also required for the market discipline mechanisms to be realized (Benink and Wihlborg, 2002; De Ceuster and Masschlein, 2003; Hosono et al, 2005; Ioannidou and Dreu, 2006; Lane, 1993).

**The Effectiveness of Market Discipline and Its Prerequisites**

The effectiveness of market discipline requires a prerequisite, such as adequate and appropriate information, which is needed by market participants in disciplining financial institutions. Llewellyn and Mayes (2003), Stephanou (2010) stated that the disclosure and availability of relevant and accurate information to all stakeholders as market participants is a prerequisite for market discipline to work effectively. The government as the supervisor of the intermediary institutions plays a role in conveying the information needed (De Ceuster and Masschelein, 2003). Hess and Feng (2005) developed a conceptual framework of the market discipline into two different components of action: the recognition/monitoring phase and the control/influence phase. Out of these two conditions, according to him, the monitoring (recognition) phase is the most important phase in the market discipline. If the first phase fails or does not exist, then the effect of market discipline is also absent; and if the second phase also does not exist, then there is the potential for market failures such as illiquid markets, adverse selection problems, and price competition or offered interest rates that disrupt financial stability. Stephanou (2010) proposed a market discipline framework that is divided into four blocks: 1). Information and Disclosure, 2). Market Participants, 3). Discipline Mechanism, and 4). Internal Governance. This market discipline framework is then used by Soma et al. (2016) to test market discipline behavior in non-bank financial institutions in Indonesia. These four market discipline framework blocks are also used in this study to verify the effectiveness of market discipline in depositors of financial institutions in commercial banks in Indonesia.

Ariefianto and Yuswanto (2013) found that, theoretically, two hypotheses must be met for market discipline to occur effectively. The first hypothesis entails market discipline giving a signal to the bank of a situation/condition that is not following the conduct of a healthy and efficient bank business (Disciplining Signal Hypotheses; DSH). Second, bank management will respond to the signal by making corrective efforts towards the business for it to be back with expected values (Corrective Response Hypotheses; CRH). Meanwhile, Soma et al. (2016) explained that financial literacy factors and personal financial behavior are factors that can cause market discipline failure. Therefore, efforts in increasing financial literacy in the community will have an impact on effective market discipline practices. The prerequisites for effective market discipline require the existence of 1). Market discipline **actors**; 2). **Information** disclosed transparently, easily accessible, and credible; 3). The **act** of actors in carrying out their role as supervisors to monitor the risk profile of financial institutions and take action to withdraw funds, request an increase in interest rates or adjust the number of funds deposited in the financial institution with a risk profile. 4). The **response** of financial institutions to the signals given by market discipline actors through lowering the risk profile. The third prerequisite—also referred to as the monitoring stage—and the fourth prerequisite is called the influence phase, such as the ability of market participants to influence the risk profile of financial institutions. Market discipline, which has been the main pillar of banking regulation since the 1980s (Min, 2014), is an action taken by depositors to control the risk of financial institutions. To actualize a sound and efficient operation of the financial institution industry, the role of market discipline is needed (Bishop et al. 1989; Goldstein et al., 1991). Several studies analyzing the ineffectiveness of market discipline performance and the weak role of regulation in monitoring financial institutions are one of the phenomena raised in this study to verify the relationship of financial literacy in improving the effectiveness of market discipline in developing countries.

**Financial Literacy and Market Discipline**

Studies on the role of financial literacy in the market discipline are still limited and need to be further developed along with the dynamic study of financial and economic stability. Financial literacy is important for individuals and families, the financial system, the economy, and monetary policy (Hall, 2008). Financial literacy is reflected in the attitude and behavior of investors in disciplining the market. Widdowson and Hailwood (2007) found that financial literacy can be a significant influence on the health and efficiency of the financial system. Soma et al. (2016) supported the previous study, agreeing that financial literacy has a significant effect on market discipline. Furthermore, Widdowson and Hailwood (2007); Soma et al. (2016) stated that the stronger the level of financial literacy among consumers of financial services, the more effective the role of market discipline in financial institutions. Hall (2008) also added that financial literacy can strengthen financial stability by increasing the role of market discipline in financial systems. Therefore, the problem of financial literacy is not only crucial for individuals, but also for the financial industry and government actors (Davies, 2015).

Financially literate societies have beneficial effects on the financial system such as:

**1.** People are smarter in making investment choices and financial products so that financial institutions are demanded to be more innovative,

**2.** Improving the practice of market discipline in financial institutions, which ultimately improves risk management practices and higher service standards.

The lack of financial literacy among depositors affects the performance of market discipline, making it ineffective that it provides a chance for financial fraud in the financial services industry. From the description above, the practice of market discipline is not only proven to be influenced by factors that have been widely studied in various countries; such as deposit insurance, macro, and microeconomic conditions, institutions; but financial literacy factors can be considered as one of the regulators' focus to support effective market discipline practices.

**Method**

This study uses structural equation modeling (SEM) to estimate the relationship between financial knowledge, financial skills, financial behavior, and market discipline. All variables have been constructed as latent variables; therefore, each variable is constructed using relevant indicators as shown in Table 1. Stephanou (2010) proposed four blocks of market discipline framework which are then used as dimensions of market discipline in this study, those are (1). Information and Disclosure, (2). Market Participants, (3). Discipline Mechanism, and (4). Internal Governance. Financial knowledge, financial skills, and financial behavior use indicators developed by Lusardi et al. (2010); Atkonson and Messy (2012) which includes basic and general financial knowledge, skills in managing cash, debt, and risk management skills and behavior in finance. Financial knowledge, financial skills, and financial behavior; each has 8 indicators, 5 indicators, and 4 indicators, while market discipline has 18 indicators. The method used in this study is a survey method with an explanatory research approach. This study used quantitative data as a result of the survey through the distribution of the questionnaires. Data were taken in a certain time frame (cross-sectional one-shot). The unit of analysis and observation unit of this study are depositors in commercial banks, such as Bank Mandiri, Bank BNI, and Bank BRI. The questionnaire uses closed-ended questions with Likert measurement scale 1-5 and open-ended questions to get information from respondents related to their experience in saving and investing. The financial knowledge indicator uses eight true and false questions. Referring to Chen and Volpe (1998), each respondent’s correct answers were then categorized into five categories, where 1 = not literate, and 5 = literate. Meanwhile, the latent variables of financial skills, behavior, and market discipline, each indicator measures the level of respondents' approval of statements with category 1 = strongly disagree and 5 = strongly agree. There are six stages in estimating structural models using the Structural Equation Model (Hair et al. 2017), they are (i) Conceptualization of the model, (ii) Preparation of the path diagram, (iii) Model specification by describing the flowchart into mathematical equations, (iv) Identification of structural models and measurement models, (v) Model of Goodness of fit Criteria, which assesses the validity of the measurement model and evaluates the validity of the structural model. Each latent variable construct consisted of the indicator constructs defined in Table 1. Figure 1 shows the measurement path diagram for all indicators, latent variables, and model specifications. Structural models that will be estimated are financial knowledge models, financial skills, financial behavior, and market discipline. The validity of the measurement model and structural validity is shown in Table 3. This study used 408 samples of depositors of commercial banks in Indonesia. Data were collected by purposive random sampling consisting of depositors who work as lecturers using financial services of commercial banks in Indonesia. This study distributed 935 questionnaires, but only 408 respondents filled out the questionnaire with responses that were complete, valid, and fit the criteria, while the rest are respondents who have deposits other than commercial banks that are not analyzed in this paper. This survey covers 34 cities in Indonesia with the distribution of the samples presented in Table 4. The sample meets the minimum sample as suggested by Hair et.al. (2017) i.e. the minimum sample size is 5-8 times the number of indicators. With the number of indicators being 35, the minimum sample requirement is 175-280. As such, the total sample size of 408 matches the minimum sample requirements. Before filling out the questionnaire, the respondent will be given a screening question to fit the criteria of the respondent, such as having a deposit with a financial institution. Respondents were given souvenirs as an incentive to encourage participation in filling out the questionnaire. Souvenirs were given to respondents who filled out complete and valid questionnaires. In the sample, the gender profile consisted of 53% men and 47% women. Most of the participants are postgraduate masters (64%), and the rest of the sample has a postgraduate doctoral education background (Ph.D.). The majority of respondents are in the income range of Rp. 5 million - Rp. 10 million (54%), 30% of respondents aged between 26 years - 35 years, 34% aged between 36 - 45 years. Furthermore, as many as 68% of respondents chose family and spouse as a source of financial information and partners in financial discussions. Only about 8% consult with a Broker/Agent/Employee of a Financial Services Institution to look for financial information and discuss partners with financial problems. Most respondents already have the habit of saving regularly which is as much as 74%.

**Results and Discussion**

Table 4 shows that the financial literacy of commercial bank customers in Indonesia has financial knowledge that fits in the ‘well literate’ category. As much as 50% of respondents answered correctly each item on four Basic and Advanced Financial Knowledge questions and four on the general knowledge variable. Based on financial literacy indicators, it is shown that respondents have skills in managing financial activities, having a 75% ‘strongly agree’ and ‘agree’ frequency, followed by skills in managing debt and financial risk (70%), while respondents' perceptions of financial behavior are known to be in the ‘good’ category which is shown by the behavioral indicators in making on-time loan payments (60%) and charitable activities (59%). From Table 5, it can be seen that financial literacy tends to increase for consumers with increasingly mature age and higher education. Respondents aged 36-45 years have an average score of financial knowledge, skills, and behavior that is higher (higher than 3). A higher amount of fund savings also shows better financial literacy and a higher need to discipline the market.

Table 6 shows the value of loading factors of each indicator in each construct variable: financial knowledge, skills, behaviors, and market discipline. Based on table 6, it can be concluded that all indicators have good validity, which is seen from a loading factor’s value that is more than 0.7 (Hair et al. 2017). Based on the validity and reliability test, it is shown that the measurement model is valid, reliable, and fit the criteria for standardized solutions above 0.4, CR values above 0.7, and AVE values above 0.5. Likewise, the results of the measurement model test by the goodness of fit model in table 6 also show that the model has a decent Goodness of Fit, seen from the RMSEA value that is less than 0.08, the P-value above 0.05, and the chi-square value below 3 compared to df. All and all, the model is considered to have decent Goodness of Fit.

Table 6 provides the Goodness of Fit for the measurement model using the chi-square and RMSEA criteria. Based on the chi-square criteria, the p-value of the chi-square for each latent variable is greater than 0.1 and can be categorized as a good fit. The p-value of the chi-square for financial knowledge, financial skills, financial behavior, and market discipline is 0.509 (good fit), 0.605 (good fit), 0.501 (good fit), and 0.870 (good fit). Based on RMSEA criteria, each latent variable is categorized as a good fit. The RMSEA for financial knowledge, financial skills, financial behavior, and market discipline is 0,000 (perfect fit).

Figure 2 shows the estimation results of the structural model and the relationship between variables and indicators to explain the value of the path coefficient from the independent variable to the dependent variable, while Figure 3 shows the significant value using the t-test of the structural model estimation. Based on this structural model test, the results of the structural equation are written in the following equation. Based on these results, it is known that the financial literacy model is proven to significantly contribute to the effectiveness of the disciplined market at commercial banks in Indonesia. Table 7 shows that the estimation of structural equation models meets the criteria for Goodness of Fit, which is based on the chi-square criteria and RMSEA, GFI, AGFI, PGFI, NFI, and CFI which fall into the category of good models or a good fit. Financial skills are the variable with the highest contribution that affects the market discipline through financial behavior mediation variables and is followed by financial knowledge of the market discipline through financial behavior mediation. Besides, the Sobel test is used to test whether the financial behavior variable becomes a mediating variable the relationship between financial knowledge and financial skills with market discipline, calculated using the Sobel test formula (formula 1) or the Sobel test calculator which can be accessed via danielsper.com. Based on the calculation of the Sobel test, it can be seen that the financial behavior variable is a mediating variable in the relationship between financial knowledge and financial skills with market discipline. This finding provides empirical support for the role of financial behavior mediation in market discipline performance. Based on the results of this analysis, it was found that depositors of commercial banks already have good financial literacy and also behave in disciplining the market. It is proven in the relationship of knowledge, skills, and behavior with a disciplined market in a positive direction. Higher or stronger financial literacy can strengthen the effectiveness of market discipline. These results are consistent with the opinions of Widdowson and Hailwood (2007), Hall (2008), and consistent with the results of an empirical study conducted by Soma et al. (2016). Empowering the community with financial literacy in terms of increasing financial knowledge and skills through seminars, workshops, and training or parts of the education curriculum is a challenge for policymakers. Educating good financial management and promoting market discipline are efforts to monitor financial institutions to create sustainable financial stability. For practitioners, such as financial institutions, these results can be used as an input for consideration of risks in financial decisions taken, while academics are expected to play a role in efforts to titrate the community through involvement in the education of financial literacy programs.

**Conclusion**

This study verifies the relationship between financial literacy and market discipline. It is found that financial knowledge and financial skills positively influence market discipline mediated by financial behavior. This study also proves that the financial behavior variable is a mediating variable in the relationship between financial knowledge and financial skills with market discipline. This can be an indication that financial literacy, i.e. better financial knowledge and financial skills, will improve good financial behavior and ultimately increase the effectiveness of market discipline. Based on the results of the descriptive analysis of income and age, it is an important factor for depositors to have better financial literacy, which can influence their financial behavior. Savings behavior today, which has shown saving behavior regularly, is an important factor to show indicators of good financial behavior. However, some challenges need to be considered by financial institutions through financial services agents/brokers, in which it was found that respondents in their financial decision-making behavior and sources of financial information predominantly rely upon those closest to them and not many of them use the services of agents/brokers/financial consultants. This shows that the role of financial institutions is still less attractive to the public in delivering financial information. Culture in saving and looking for financial information now is predominantly influenced by the closest to respondents, such as spouses, parents, and friends.

**Recommendation**

The challenge for practitioners today is finding ways to be present in the community through their financial agents/brokers to educate and provide information related to savings and investment products that are attractive to depositors since it will have a major impact on their financial decisions. The use of agent/brokerage services from financial institutions for consulting financial products and services is still relatively low.

This research also recommends regulators to empower depositors and the wider community with financial literacy through training programs, workshops, and seminars related to financial literacy and in collaboration with universities, schools, and government and private agencies. The government should also have a target level of financial literacy to be achieved. Thus, the success of these financial literacy improvement programs has measurable indicators. Market discipline also needs to be promoted to the public. By knowing the importance of their role in monitoring financial institutions, the risk of moral hazard practices in financial institutions can be anticipated. The principle of prudence is the concern of all parties, such as depositors as customers or principals, financial institutions as agents, and regulators as policy and guidelines makers in the financial system. With the development of a good ecosystem in the financial system, financial stability will be maintained.