Investigating the effect of financial literacy on financial inclusion: Mediating role of financial technology

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Abstract: This research aims to analyze the relationship between financial literacy variables and financial inclusion, the relationship between financial literacy variables and financial technology, and the relationship between financial technology variables and financial inclusion. The analysis of this research is to learn more about how financial literacy and the use of financial technology influence financial inclusion. This type of research is associative and quantitative. Next, the relationship between these variables is explained using statistical formulas. Consequently, the term for this research is “quantitative research”. The study population is the number of people who use financial services. For this sampling, the purposive random sampling method was used. The following criteria are determined in sampling: 1) Minimum age 17 years, this is intended to take the minimum age standard in sampling and is considered capable of understanding the contents of the questionnaire statements. 2) Have ever used financial services. In this study, 11 question items were used to measure 3 variables, so this study used the largest range, namely 231 respondents. The intervention variable will be used as a reference for the Partial Least Square (PLS) method to analyze this research data. This study uses a causal model (causal modelling, relationships, and influence) or path analysis. The hypothesis that will be discussed in this research is tested using the Structural Equation Model (SEM), which is operated with Smart PLS. The results of this research show that financial literacy has a positive and significant impact on financial inclusion in society. Financial literacy has a positive and significant impact on financial technology. Financial technology has a positive and significant impact on financial inclusion, financial technology can offset the impact of financial literacy on financial inclusion. The results of this research are used as input for the community so that they pay more attention to their internal human resources related to financial products that can be used for investment. With knowledge of the right financial products, it is hoped that they can create good financial behaviour so that an awareness of the importance of carrying out good financial planning. For financial institutions, it is hoped that this can increase easy access to financial products and services, in particular credit for businesses as additional capital for the community.

Keywords: financial literacy; financial inclusion; financial technology; SMEs; SEM, Indonesia

1. Introduction

Financial literacy helps empower and educate small businesses so that they
have the knowledge and can evaluate various financial products and services to make wise financial decisions. Financial inclusion is included in the financial literacy program, especially to increase the ability of small businesses to use financial services and get a direct impact from financial institutions. The higher the increase in financial inclusion in SMEs, the more it will ultimately increase the financial stability of a country (Cohen and Nelson, 2011). The National Strategy for Financial Inclusion (SNKI) was created by the government to achieve equitable economic growth and eliminate economic and social inequalities in society by increasing public access to financial services. Financial inclusion encourages economic growth, financial system stability, poverty reduction and economic disparities between individuals and regions. Financial inclusion is intended to make access to various financial assets and services easier, faster and cheaper (Irman et al., 2021). The aim is to improve prosperity and financial inclusion. This is achieved through the implementation of new and advanced approaches, including increased financial awareness and education. With the main aim of providing financial services, the inclusive financing program is called financial inclusion. With increased financial inclusion, the financial services sector of developing countries is expected to develop more quickly. Financial inclusion includes access to all necessary financial products, organizations and services as well as the level of community ability to improve the welfare of society. Financial inclusion is when the majority of people can take advantage of available financial services. This minimizes the number of people who are unaware of the benefits of financial access because this access is available at no cost. The Financial Services Authority (OJK) conducted the National Survey of Financial Literacy and Financial Inclusion (SNLIK) in Indonesia (Rahadjeng et al., 2023).

In financial management, financial inclusion is very important. Based on the definition of financial management and its relationship with the theory of planned behaviour, individual decision-making helps financial inclusion because it is related to the availability of access to financial products and services. Financial management is not only expected in profit-oriented organizations or companies but the concepts and theories can be applied to individuals. Individuals who are capable and have access to various kinds of financial products and services can be said to have a good level of financial inclusion, and these individuals can manage their finances well by financial management concepts and theories which provide knowledge about financial management, which is related to financial management. With personal finance, financial literacy is very important for the economic growth of a country, especially developing countries like Indonesia (Bhuvana and Vasantha, 2019). Everyone should have a good understanding of finances to avoid financial problems. Lack of knowledge about finances can have a negative impact, and one of the factors that influences financial decisions is ignorance. By increasing financial knowledge, it is hoped that you can balance the income earned with the costs incurred. Since everyone’s income is different, having a good understanding of finances will help them manage their finances better. Therefore, everyone should have a good understanding of finances so that they can use their money wisely and efficiently. Because scientific development is usually slower, increasing financial inclusion is very important because the financial literacy of traditional rural communities is very
limited. The amount of financial inclusion has increased as a result of advances in financial technology. This technology has spread to various fields, and the encouragement of financial literacy and financial technology has made financial inclusion quickly spread to modern and conventional villages. The goal of this increased knowledge is to help people who are unfamiliar with financial management to take a better stance on wise investments. They can use their savings and credit cards, which helps them understand, evaluate, and act on their financial interests. Human life is experiencing very rapid changes as a result of technological developments and emerging problems. One of them is the discovery of non-cash payments which are made along with advances in technology.

Technological developments have changed our daily lives. Electronic media has become one of the main media for communicating and doing business using the internet. The financial and technology sectors have been working together for a long time, and technological advances are nothing new. All societal activities in the current digital era require technology. Technological developments have been utilized by almost all industries to make discoveries, including the financial sector. discoveries in the field of financial technology. Many financial technology companies have emerged in Indonesia showing quite rapid development in the financial industry (Pandey et al., 2022). Nowadays, people use technology to carry out their daily activities, such as buying food, ordering transportation, sending goods, doing business, and booking tickets. With technology, people find their work more efficient and helpful. Fintech, which is a concrete manifestation of the use of information technology that connects it with the financial services sector, affects the level of financial inclusion in addition to low financial literacy. Fintech is a massive and rapidly growing industrial movement with a variety of business models. Fintech is the advancement of information technology innovation through the creation of new financial service models. The massive development of fintech has given rise to several problems in criminal acts, so regulations are needed that support the existence of fintech as a form of prudence. Fintech exists because it aims to make it easier for people to obtain monetary goods, increase exchange, and increase monetary incorporation at the same time. Rapid technological developments in the financial sector have resulted in many new companies in the financial technology sector. The company provides financial technology services that can be accessed by two customers easily. Digital-based financial services are developing in Indonesia, including peer-to-peer loans, digital payment systems, digital insurance, digital banks and crowd-funding. Financial technology will increase people’s access to financial goods and services, increase availability, and increase the quantity and quality of use (Khan et al., 2022).

This research is very important. Many people do not understand finances, causing them to experience losses, either due to declining economic conditions and inflation or because of the development of an economic system that tends to be wasteful because society is increasingly consumerist. Based on the National Financial Literacy Survey conducted by the Financial Services Authority (OJK) in 2023, shows the low understanding and utilization of financial products and/or services among the Indonesian people. Where only 21.84% of the Indonesian population is classified as well literate, that is, they have knowledge and confidence
about financial service institutions and financial products and services, including features, benefits and risks, rights and obligations related to financial products and services (Hasan and Hoque, 2021). The level of financial literacy and financial inclusion of the Indonesian people is still relatively low compared to other countries in Asia, even though financial inclusion contributes positively to economic growth and improves people’s welfare which ultimately leads to a reduction in poverty levels, financial inclusion is very important to increase efficiency economy, supporting financial system stability, reducing shadow banking or irresponsible finance, can support financial market deepening, provide new market potential for banking, and support an increase in the Human Development Index (HDI). Fintech helps streamline transaction and administration costs in financial services (Hussein, 2020). Fintech helps consumers get services at lower costs and increases company profitability. Fintech is a tool to make it easier for people to utilize the resources they need so that it becomes easier and more efficient. People who have higher financial literacy will make themselves more confident in making decisions.

Research gap

Previous research (Hussein, 2020) that has been carried out has found factors that can influence behaviour in financial management, namely age, gender, race, socio-economic status, personal characteristics, personal traits and knowledge. In other research, factors that influence financial management behaviour include financial knowledge, financial attitudes, and external locus of control. Other research states that social factors, demographics and financial knowledge influence a person’s financial management behaviour. Other research states that financial education in the family and the role of teachers have an impact on financial management. The research of Jaya (2019) shows that financial literacy has an impact on financial management behaviour. Research findings show that a person’s financial attitude influences the way they handle their finances. The findings of this research are in line with those found in other research which states that a person’s financial attitude influences the way they manage their money. These consequences will have a rather long period. Other research (George and Pathanamthitta, 2020) states something different, namely that financial views do not have an impact on how money is managed by individuals and financial management behaviour is not influenced by beliefs related to money management. This is because each person has a unique perspective regarding money, including how to approach the current precarious financial position.

This research is financial literacy and is intervened by financial technology variables. The selection of this variable is based on several previous studies, where there are different research results. One indicator of financial inclusion is financial technology on financial literacy. Previous research (Martini et al., 2022) related to financial literacy through financial technology on financial inclusion is also different. Financial literacy influences financial inclusion. However, other studies have found that financial literacy does not affect financial inclusion. Apart from that, the results of previous research are different from the financial technology variable on financial inclusion. Financial technology has a positive and significant impact on
financial inclusion (Bansal, 2014).

2. Literature review

2.1. Financial literacy

Financial literacy is knowledge, skills and beliefs that influence attitudes and behaviour to improve the quality of decision-making and financial management to achieve community financial prosperity. Financial Literacy also provides great benefits for the financial services sector (Hasan et al., 2022). Financial institutions and society need each other so that the higher the level of financial literacy in society, the more people will utilize financial products and services. Financial literacy is knowledge about financial sectors and how to utilize them (Hasan et al., 2022). Recognize the meaning, levels and importance for society. Financial literacy is people’s knowledge and skills related to finances so they can manage and utilize finances optimally. With financial literacy, people are expected to have adequate financial education so they can take a stand and make financial decisions wisely. The first importance of financial literacy is that people become more aware of various kinds of financial products (Sisharini et al., 2019). The wider their financial knowledge, the more familiar and familiar people will be with financial products on the market. After knowing this, people will be able to enjoy the benefits of each financial service. An example of financial literacy is that people can use debt for productive activities. With the development of financial literacy, people are becoming aware that being in debt is not always bad. On the contrary, debt can help improve the economy if it is used as productive debt (Gautam et al., 2022). Good financial literacy has long-term benefits for every individual. Two long-term benefits can be obtained, namely increasing previous literacy or less literate to well literate, and increasing the number of uses of financial products or services. Financial literacy is also able to enable someone to manage and take every opportunity to have a more prosperous life in the future.

2.2 Financial inclusion

Financial inclusion is the availability of access to various formal financial institutions, products and services by community needs and abilities to improve community welfare. This increase in access is also supported by increasing public understanding of financial systems, products and services, as well as the availability of formal financial services (Gautam et al., 2022). As for access to financial products, systems and services according to people’s needs, several factors need to be considered: affordable costs, effectiveness and efficiency, and quality. Financial inclusion is access to useful and affordable financial products and services to meet the needs of society and business, including transactions, payments, savings, credit and insurance, which are used responsibly and sustainably. Financial inclusion refers to the availability of access to various formal financial institutions, products and services by community needs and capabilities, to improve community welfare (Wufron et al., 2023). Financial inclusion can be understood as an effort to provide access to financial products and services to everyone without limited background.
This means that everyone should be able to access bank accounts, insurance, loans, investments and various other financial services. Financial inclusion helps increase economic equality by enabling people from various economic strata to meet their needs through available financial products and services. For example, loans that can help with vehicle ownership or setting up a business. Financial inclusion minimizes economic inequality, contributing to better economic growth. Through access to capital loans and digital payments, people can improve the economy (Asyik et al., 2022).

2.3. Financial technology

FinTech is an abbreviation of financial technology which can be interpreted as financial technology which is a form of innovation in the development of innovation in the financial sector so that it can be carried out more effectively, efficiently and easily (Telukdarie and Mungar, 2023). Financial technology is a combination of technology and financial features or can also be interpreted as innovation in the financial sector with a touch of modern technology. Financial technology is the benefit expected by information system users in carrying out their duties, where the measurement is based on the intensity of use, frequency of use and the number of applications or software used. FinTech is an alternative investment that presents options for Attitude friends who have the desire to access financial services in a practical, efficient, comfortable and economical way (Desai et al., 2022). FinTech emerged along with changes in people’s lifestyles which are currently dominated by users of information technology, and the demands of life, which is fast-paced. With FinTech, problems in buying and selling transactions and payments such as not having time to look for goods at shopping places, going to banks/ATMs to transfer funds, and reluctance to visit a place because of unpleasant service can be minimized. In other words, FinTech helps buying and selling transactions and payment systems become more efficient and economical but still effective.

3. Research method

This research aims to learn more about how financial literacy and the use of financial technology influence financial inclusion. This type of research is associative quantitative. Next, the relationship between these variables is explained using statistical formulas. Consequently, the term for this research is “quantitative research”. The study population is the number of people who use financial services. For this sampling, the purposive random sampling method was used. The following criteria are determined in sampling: 1) Minimum age 17 years, this is intended to take the minimum age standard in sampling and is considered capable of understanding the contents of the questionnaire statements. 2) Have ever used financial services. In this study, 11 question items were used to measure 3 variables, so this study used the largest range, namely 231 respondents. The intervention variable will be used as a reference for the Partial Least Square (PLS) method to analyze this research data. This study uses a causal model (causal modelling, relationships, and influence) or path analysis. The hypotheses that will be discussed in this research are tested using Structural Equation Models (SEM), which are
operated with Smart PLS.

The hypothesis of this research is:

H1: Financial literacy has a positive and significant impact on financial inclusion.

H2: Financial literacy has a positive and significant impact on financial technology.

H3: Financial technology has a positive and significant impact on financial inclusion.

H4: Financial technology mediates the relationship between financial literacy and financial inclusion.

The research model in Figure 1 shows that the independent variable in this research is financial literacy, the dependent variable is financial inclusion and the mediating variable is financial technology. Financial literacy can be measured using 4 (four) indicators, namely basic knowledge of financial management, credit management, savings and investment management. Indicators of financial inclusion are the number of account owners per population and the number of accounts used for saving and carrying out transactions within the last year. Indicators that can be used to measure financial technology include benefits of use, ease of use, website appearance, system availability, privacy and security.

![Figure 1. Research model.](image)

4. Result and discussion

4.1. Convergent validity

The purpose of convergent validity is to evaluate the validity of indicators as construct measures based on Smart PLS external loadings. The indicator is considered valid if the external load value is greater than 0.5. The external load value can also show the contribution of each indicator to the latent variable. The outer loading value of an indicator with the highest value indicates that the indicator is the strongest or most significant measure of the latent variable. By looking at the results
of the external examination of the model, we can find out the external load of each indicator on certain variables, as shown in Figure 2.

As shown in Figure 2, the indicators that measure each variable have validity as variable measures, because they have an external loading value above 0.5. The square root of the average extracted (AVE) value for each latent indicator in the model is compared with the correlation between other latent indicators.

![Figure 2. Validity testing.](image)

The recommended AVE value is greater than the AVE value shown in Table 1, which shows the value of discrete validity and composite reliability (CR). According to the results of evaluating the convergent and discriminant validity of each latent variable, data from Table 1 shows that the model has good discriminant validity. AVE of three latent variables is above 0.5.

### Table 1. Loading factors, Cronbach alpha, CR and AVE.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Factor loadings</th>
<th>Cronbach’s alpha</th>
<th>rho_A</th>
<th>Composite reliability</th>
<th>Average variance extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial literacy</td>
<td>FL1</td>
<td>0.899</td>
<td>0.836</td>
<td>0.853</td>
<td>0.815</td>
<td>0.798</td>
</tr>
<tr>
<td></td>
<td>FL2</td>
<td>0.908</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FL3</td>
<td>0.917</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial inclusion</td>
<td>FI1</td>
<td>0.926</td>
<td>0.876</td>
<td>0.801</td>
<td>0.808</td>
<td>0.704</td>
</tr>
<tr>
<td></td>
<td>FI2</td>
<td>0.929</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FI3</td>
<td>0.943</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial technology</td>
<td>FT1</td>
<td>0.919</td>
<td>0.818</td>
<td>0.801</td>
<td>0.894</td>
<td>0.723</td>
</tr>
<tr>
<td></td>
<td>FT2</td>
<td>0.904</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FT3</td>
<td>0.866</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2. Discriminant validity

The discriminant validity test is used to check the discriminant between measurement scales in research are shown in Table 2 below. The Heterotrait-Monotrait (HTMT) discriminant validity limit value cannot be greater than 0.90.

<table>
<thead>
<tr>
<th>Financial literacy</th>
<th>Financial inclusion</th>
<th>Financial technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial literacy</td>
<td>0.808</td>
<td></td>
</tr>
<tr>
<td>Financial inclusion</td>
<td></td>
<td>0.734</td>
</tr>
<tr>
<td>Financial technology</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3. Hypothesis testing

The test results for each path are described below, and the results for the mediating variables and partial direct effects are shown in Table 3 and Figure 3 below.

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Original sample</th>
<th>t statistics</th>
<th>P values</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL → FI</td>
<td>0.399</td>
<td>4.973</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>FL → FT</td>
<td>0.739</td>
<td>17.981</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>FT → FI</td>
<td>0.458</td>
<td>5.286</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

4.4. The influence of financial literacy on financial inclusion

The research results show that knowledge about finance is useful and important for financial inclusion in Bangli Regency society. Financial literacy is a person’s ability to manage their finances. This includes knowledge of financial concepts, an understanding of investment risks and rewards, and the ability to make wise financial decisions. People who know about finance will be wiser when using financial
services; on the contrary, people who do not know about finance will be prevented from making the right decisions when choosing financial services (Hasan et al., 2021). However, someone who has good financial knowledge will have a greater perception to make wise and responsible decisions based on their previous experiences. Previous studies found a strong relationship between financial knowledge and financial access (Hussein, 2020). This study shows that financial knowledge causes major changes.

4.5. The influence of financial literacy on financial technology

The research results show that knowledge about finance has a positive and significant relationship with society regarding financial technology. Financial technology is influenced by financial knowledge; With good knowledge, financial technology can also be used well. Financial technology combined with good financial knowledge is expected to increase the use of financial technology. Fintech seeks to utilize technology to speed up financial services by making financial transactions more efficient and practical (Jaya, 2019). Previous studies show that interest in fintech advances can be influenced by financial literacy towards financial inclusion (George and Pathanamthitta, 2020).

Financial technology has implications for financial inclusion. Financial Technology, often known as digital finance, is a digital financial breakthrough in accessing financial products and services. The existence of fintech can reduce barriers to accessing financial service information because everything is done online. The availability of financial services can reach people who were previously hampered in accessing products and financial services (Hapsari and Puspitasari, 2024). The transformation which was initially carried out in person and in cash to become digital can save time and costs for the people. This research found that financial technology had a positive and significant effect on financial inclusion. This means that more people using financial technology will encourage inclusive financial applications. The presence of financial technology such as technology-based payment products that have been classified as digital banks, peer-to-peer lending, digital wallets and insurance applications supported by high internet penetration will make things easier for the public (Haudi et al., 2022).

4.6. The influence of financial technology on financial inclusion

The research results show that financial technology, also called fintech, is a combination of financial sector systems and technologies that enable the purchase and sale of goods or services at any time. Financial technology increases financial inclusion. Bank Indonesia stated that the growth of fintech was caused by the use of technology as a fast-paced necessity in modern life. With the presence of fintech, the problem of buying and selling transactions and payments that require trips to shops, banks or ATMs to carry out funds transactions can be reduced. This can also reduce the number of people who are unhappy with the service at the shopping centre. In other words, fintech makes the payment process and buying and selling transactions easier, more efficient and cost-effective without losing effectiveness. The number of people who use financial technology will increase financial inclusion (Martini et al.,
Previous studies support this statement. Research shows that financial technology services increase financial inclusion (Bansal, 2014).

Financial literacy has a positive and significant relationship to financial inclusion. Financial literacy and financial inclusion are important to go hand in hand (Muhajir et al., 2022). Financial literacy promotes financial inclusion and attracts consumers to access formal financial institutions for the first time. Increasing financial literacy can increase awareness and understanding of financial products and services while increasing demand and use. The results of this research are in line with the theory that financial literacy increases demand for financial products and services, while inclusion will increase the supply of financial products and services which will ultimately increase financial wellbeing (Juwaini, 2022). The research results also support other research, that there is a positive relationship between financial literacy and financial inclusion.

4.7. Financial technology mediates the effect of financial literacy on financial inclusion

Studies show that financial technology can offset the impact of financial literacy on financial inclusion. Increased financial literacy is necessary to select and consider various types of financial products and services. The presence of fintech encourages economic growth because the number and value of transactions continue to increase. However, online and cashless shopping habits lead to consumerism, which can affect a person’s financial behaviour, despite its benefits (Hasan et al., 2022). Increasing public financial literacy is followed by improvements in financial technology. In his research, the results of previous research show that financial technology can mediate (Sisharini et al., 2019).

Previous research by Wijayaa et al. (2021) showed that financial literacy variable indicators were measured by knowledge, behaviour, attitudes and financial skills. The financial literacy variable indicator is measured by general knowledge, savings and loans, and investment. Then in research by Asmana et al. (2024) the variable indicators of financial inclusion were measured by access, use, quality and welfare. Research of Kurniawan and Soediantono (2022) shows indicators of financial inclusion variables measured by access, quality and use. Furthermore, research by Telukdarie and Mungar (2023) shows that financial technology variable indicators are measured by indicators of increasing e-commerce transactions, consumer acceptance of digital products, gaining convenience and efficiency, and providing solutions to financial problems. Meanwhile in research of Desai et al. (2022) the financial technology indicators used are ease, use and benefits. Then, measuring the performance of MSMEs in research of Hapsari and Puspitasari (2024) uses indicators of cash position, business growth, profit growth and customer growth. The presence of financial inclusion can overcome various causes, one of which is overcoming low financial literacy in Indonesia. One of the intelligences that modern humans must possess is financial intelligence, namely intelligence in managing personal financial assets. Financial knowledge and skills in managing personal finances are very important for everyday life. Financial literacy is a must for every individual to avoid financial problems because individuals are often faced
with a trade-off, namely a situation where a person has to sacrifice one interest for the sake of another. By implementing correct financial management methods, it is hoped that individuals can get maximum benefits from the money they have. Modern society’s activities tend to use technology more intensively to meet its needs. It has become a habit of today’s people to carry out daily activities using technology, such as buying food, ordering transportation, sending goods, ordering tickets, and doing business. Because of technology, people feel that their activities have become more helpful and more efficient. Fintech has been a popular term in recent years. When someone hears the term fintech, what comes to mind is all the convenience and speed in financial transactions, such as ease and speed in payments, borrowing, sending, and so on. With fintech, it is hoped that you can save time, thought, energy and costs. Fintech is an innovative service in the financial sector that uses or exploits the role of technology.

In essence, fintech is a technology-based financial service. Paying electricity bills, vehicle installments or insurance premiums online are some examples of fintech products that are often used in everyday life, as are sending money or checking balances via online banking. Using fintech is one way to increase financial literacy. Fintech may be able to take over in the economic recovery process. The characteristics of fintech are low contact economy, client-based, based on social capital, use of information science and driven by young experts, the progress of fintech during the pandemic is still positive. Several fundamental characteristics of fintech that can be described also reflect the role of fintech in expanding financial inclusion as follows: one, making the financial system more accessible and decentralized through the use of technological advances that enable non-bankable MSMEs and individual communities to participate as providers and users of assets in the system finance; second, expanding transparency, responsibility and joint efforts in various fields, where innovation can provide transparency, tracking, responsibility and sharing of data that is more important for the state, society and the private sector to work together and third, reducing costs through increasing productivity, speed, and computerization.

4.8. Practical implications

The results of this research are used as input for the community so that they pay more attention to their internal human resources related to financial products that can be used for investment. With knowledge of the right financial products, it is hoped that they can create good financial behaviour so that an awareness of the importance of carrying out good financial planning. Interested parties such as local governments, financial policymakers (banks, financial services authority), and deposit insurance institutions play a greater role in increasing financial literacy in the business sector and need to create programs to increase self-confidence in running their businesses. Low financial literacy and financial attitudes can cause community actors to be unable to make wise decisions and lack responsibility in managing their businesses. This can cause the business to experience financial problems and can lead to bankruptcy. Good public financial literacy will help in managing finances, analyzing returns and risks, and determining appropriate investment instruments. For financial
institutions, it is hoped that this can increase easy access to financial products and services, in particular credit for businesses as additional capital for the community.

4.9. Theoretical implications

The results of this research show that the development of science needs to pay attention to financial management behavioural factors such as financial literacy and locus of financial control. These two factors have been proven to influence financial management behaviour. Therefore, this research provides an illustration for researchers to research further the relationship between these four variables and financial management behaviour. The theoretical implications of this research support previous research findings regarding good financial management behaviour. Financial literacy is balanced with self-control as a level of knowledge and self-awareness in implementing an understanding of concepts and risks in making financial decisions to improve individual welfare. The results of this research theoretically strengthen the signaling theory that the signals given by companies through investment managers are used by investors to make investment decisions, this is because investors have good financial literacy. Financial literacy has a positive effect on financial inclusion.

5. Conclusion

This research was conducted to determine whether financial technology can have an impact on financial literacy on financial inclusion. After the discussion above, the researcher came to the following conclusions: 1) Financial literacy has a positive and significant impact on financial inclusion. 2) Financial literacy has a positive and significant impact on financial technology. 3) Financial technology has a positive and significant impact on financial inclusion in society. 4) Financial technology can offset the impact of financial literacy on financial inclusion. This research was conducted to help financial service users. Because financial knowledge is very important in managing funds, people must understand that this knowledge is the most important factor in making decisions about the use of financial services. People who understand financial technology are expected to dig up information about financial products and services. In the fintech era, even though the ease of transactions is offered through handheld (mobile banking via cellphone) or Cash Deposit Machine (CDM) which does not require customers to visit or come directly to the bank, however, past habits or repeated habits that form habits are not easy to change even with digitalization. Apart from that, emotional factors to obtain a sense of security, comfort and practicality can also be the basis for customers to continue making transactions directly with the Bank. Future researchers can develop research with considers other factors that influence behaviour consumptive, with the limitations of researchers, it is hoped that further researchers can develop this research with different research subjects and populations, research variables and research methods that are different from researchers. In increasing financial literacy, the role of government is needed to support the public to have financial literacy understanding and skills by holding training and counselling regarding financial literacy. In financial inclusion, the government plays a very important role in the
sustainability and development of community financial inclusion, namely by expanding access to financial inclusion to all corners of the region so that every community has the opportunity to access financial institutions.

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