

Determinant Factor Influencing Financial Inclusion in MSMEs

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Abstract. The aim of the research is to analyze the influence of financial behavior on financial inclusion using financial technology as a mediating variable. The research method used is a quantitative method. The population of this research is MSME stakeholders in Banyumas Regency. Regarding this research, 100 samples were collected using target sampling techniques. The data collection method uses a questionnaire and is distributed to MSMEs that have implemented financial technology in their activities. The results obtained are that financial literacy has a positive effect on financial inclusion, financial behavior has no effect on financial inclusion. In this study, financial technology has an effect in moderating the impact of financial literacy and financial behavior on financial inclusion of MSMEs in Banyumas Regency. The study introduces novelty by examining psychological factors in financial literacy and financial behavior, and how these two factors influence MSMEs in accessing formal financial services.

Keywords: Financial Literacy, Financial Behavior, Financial Technology, Financial Inclusion

Introduction

The 4.0 industry revolution has brought number of changes in Indonesia, this phenomenon can obviously be seen from the rapid development of creativity that utilizes technology, one of which is in the economic field, for instance, Medium, Small, and Micro Enterprises, which are often referred to as MSMEs as strategic and most popular issues in Indonesia. MSMEs have emerged to be part of the key factor of economic growth in Indonesia. Back when the crisis hit in the 1997/1998, the numbers of MSMEs were to be proven settled down and avoid falling, for further, it is now even continued to increase. This is shown by the evidence that MSMEs are more resilient in facing the economic crisis in Indonesia (Zakiah Nur Azizah, Fadilah Novita Dewi, 2022).

The growth of MSMEs in Banyumas region reaches 25% per year (BPMPP, 2018). The number of MSMEs that increase every year has proposed Banyumas Regency as one of the largest contributors of income in Central Java (Dinperindagkop, 2017). The financial aspect that exists in MSMEs is a massively important to be considered. Starting from the knowledge of MSME actors in using financial services, planning investments for the future, and for broaden use of technology in the financial sector. This is closely related to financial literacy, financial behavior, and so does financial inclusion. Financial literacy and better financial behavior will attempt to strike the increase in financial inclusion in MSME actors (Desiyanti, 2016). In fact, understanding and knowledge on financial aspects are not in essence belong to MSME actors (Sari et al., 2019).

MSME is a form of business established by a person to be met the criteria in the law. The role of MSMEs in Indonesia is very important to the economic sector and GDP contributors in Indonesia (Salman Al Farisi, Muhammad Iqbal Fasa, 2022). It can be fairly said that UMKM is a business owned by individuals with certain restrictions and criteria that are included in the law. The development of existing technology also alters serious impact on lifestyle changes to the society in the financial sector, which was previously made conventionally, changed virtually with financial technology or abbreviated as fintech. The existence of this fintech is considered important and assists the public carrying out online transactions. This Fintech will continue to develop considering the rapid development of technology (Apriliani & Yudiaatmaja, 2022).

Financial literacy is the expertise possessed by someone in understanding and using various financial concepts (Ayuk & Marta, 2019). Good financial literacy needs to be owned by MSME actors in making good decisions so that effective and efficient results are created. Financial problems can be avoided by someone if they have good financial literacy (Yushita, 2017). In this variable, there are several dimensions used, namely financial knowledge, financial ability and financial attitude (R. et al., 2022).

A person's expertise in managing their finances in order to achieve effective and efficient financial goals is the definition of financial behavior (Khairani et al., 2019). Financial management in individuals with responsibilities is also related to financial behavior (Rahmayanti et al., 2019). Good management and use of money will be owned by someone who is responsible. Dimensions of financial behavior include consumption, Savings and investment (Paramita Kisti et al., 2020). Indicators in financial behavior are an important tool to measure whether the person is capable or not in managing his finances. Indicators used in financial behavior include financial planning, investment, capital budgeting. Choosing the right indicator, someone can achieve their financial goals.

Financial inclusion is an effort made to improve access to financial service information to the public (Solihat, 2021). Financial inclusion plays a role in improving people's ability to manage their finances. Financial inclusion can increase financial access, increase the ability of business actors in their financial management, as well as increase the ability of the community to deal with financial risks that will be faced (Martin & Soetjipto, 2022). All activities that support the creation of financial inclusion must be encouraged, that is because financial inclusion can help economic growth and development in Indonesia (Koomson et al., 2020).

Financial technology is any form of technology planned and specified an important and simplify automation the use of financial services (Kusuma & Asmoro, 2021). Fintech also uses information technology to increase the efficiency and capability of financial services, as well as increase financial access for the community. The use of this financial technology is used to provide financial solutions for the users. Financial Technology also changed the business that was previously carried out conventionally, where payments were made directly in cash and the need for cash in hand into transactions that were easily conducted within a few seconds (Riadloh & Nasution, 2023). The problems experienced by MSME actors encourage this research to be carried out by using FinTech as a tool to identify the impact of financial literacy and financial behavior on financial inclusion. Therefore, this research aims to determine the influence of financial literacy and financial behavior in regard of financial inclusion with fintech as a moderation variable in MSMEs in Banyumas Regency.

Humans have the power to think and use information systematically. This is the basis of the theory of planned behavior. Behavior will be influenced by belief (Rokhayati et al., 2022). The solution will appear automatically once humans trace a problem. Based on the problem and solution that he has; the best solution will be revealed due to an immediate case solution. This also applies to the theory of innovation diffusion, which is also known as innovation decisions. The innovation developing today is technology-based innovation. The result of technological innovation felt by all aspects of life. One of which is economic aspect. The ease of doing activities in economic activities gives a chance to arise in technology business activities, also called financial technology (Putu et al., 2020).

The division of innovation through the internet has a great alteration in accelerating the adoption rate. The existence of the internet in this digital era simplifies easily for MSME actors to absorb various information related to their business. Financial inclusion becomes a goal in business activities, where business people expect to have access and competence related to the financial services used (Hadi et al., 2019). This is supported by research explanation that business activities require capital and knowledge on financial aspects (Rahmayanti et al., 2019). Factors that influence the formation of financial inclusion are financial literacy and financial behavior. Financial behavior is part of financial management, in which financial behavior is a process aimed to manage finances effectively and efficiently in achieving goals (Brilianti & Lutfi, 2020). Consumption, Savings and investment are three main aspects considered essentially in financial behavior (Kholilah & Iramani, 2013). Financial conditions will be well controlled if financial management is carried out properly. That is, if financial inclusion, financial literacy and financial behavior continue to improve then the company's performance will increase significantly.

The current economic development will be formed faster through the role of well-implemented fintech (Putu et al., 2020). Fintech provides services that are easily accessible and used by its users. The positive impact will positively undergo its users if they can make good use of fintech services (Hijir, 2022). To sum up, it can be concluded from the explanation above, a hypothesis obtained:

H1: Financial behavior has a positive effect on financial inclusion

- H2: Financial literacy has a positive effect on financial inclusion
- H3: Financial technology moderates the influence of financial behavior on financial inclusion
- H4: Financial technology moderates the influence of financial literacy on financial inclusion

Research Model

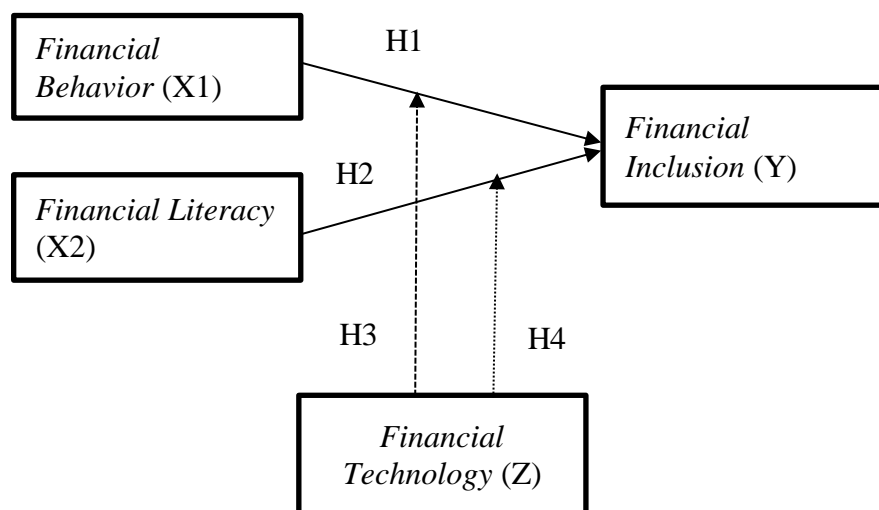


Figure 1. Conceptual Model

Methods

The type of research carried is quantitative research with an associative approach measured through a likert scale (Sugiyono, 2013). MSMEs located in Banyumas Regency became the population in this study. The sampling used in this study was purposive sampling techniques and obtained samples of 100 MSMEs in Banyumas Regency. The method managed for data collection is to share the questionnaire directly to all respondents.

Result and Discussion

This Research used 100 respondents obtained by distributing questionnaires online via Google Forms as show in Table 1.

Table 1. Descriptions of Research Respondents

Categories	Details	Amount	Percentages (%)
Gender	Men	32	32
	Woman	68	68
Age (Years)	20-30	63	63
	31-40	15	15
	41-50	12	12
	>50	10	10
Education Level	High School	7	7
	Diploma	5	5
	Bachelor's Degree	73	73
Expenditure (million)	Master Degree	15	15
	1.000.000-2.000.000	14	14
	2.000.000-4.000.000	70	70
	>4.000.000	16	16

Source: processed data

Outer Model Measurement

The evaluation of this outer model is carried out because the quality of the measurement of the latent variable will affect the reliability and validity of the whole model (Ghozali & Latan, 2015).

Table 2. Outer Model Measurement Results

Constructs/Items	Outer Loadings	Cronbach's Alpha	CR	AVE
Financial Behavior				
FB 1	0,721			
FB 2	0,92	0,859	0,896	0,685
FB 3	0,735			
FB 4	0,913			
Financial Literacy				
FL 1	0,935	0,865	0,937	0,881
FL 2	0,942			
Financial Technology				
FT 1	0,963	0,922	0,962	0,928
FT 2	0,963			
Financial Inclusion				
FI 1	0,841	0,74	0,881	0,788
FI 2	0,932			

Source: processed data

The Cronbach alpha value and composite reliability in this study for each variable are above 0.7 with good reliability values. Therefore, the condition of the relationship between variables is good, thus supporting further testing.

Inner Model Measurement

The relationship and influence between variables can be known through the path coefficient test. A significant relationship has an influence if the requirements have a t-statistic value > 1.96 and a p value < 0.05 are met (Sarstedt et al., 2020).

Table 3. Hypothesis Test Results

Categories	STDEV	t-count	P-Value	Conclusion
Financial Behavior > Financial Inclusion (H1)	0,109	1,703	0,089	Rejected
Financial Literacy > Financial Inclusion (H2)	0,107	6,311	0,000	Accepted
Financial Technology to moderate Financial Behavior > Financial Inclusion (H3)	0,120	2,759	0,006	Accepted
Financial Technology to moderate Financial Literacy > Financial Inclusion (H4)	0,119	2,161	0,031	Accepted

Source: processed data

From the four hypotheses collected, one hypothesis was rejected, and three other hypotheses were accepted. The rejected hypothesis is the influence of financial behavior on inclusive finance as evidenced by the p-value of 0.089, which is above 0.05. The accepted hypothesis is the influence of financial literacy, financial

technology in moderating financial behavior and financial literacy on financial inclusion as evidenced by the p-value of 0.000, 0.006 and 0.031, below 0.05.

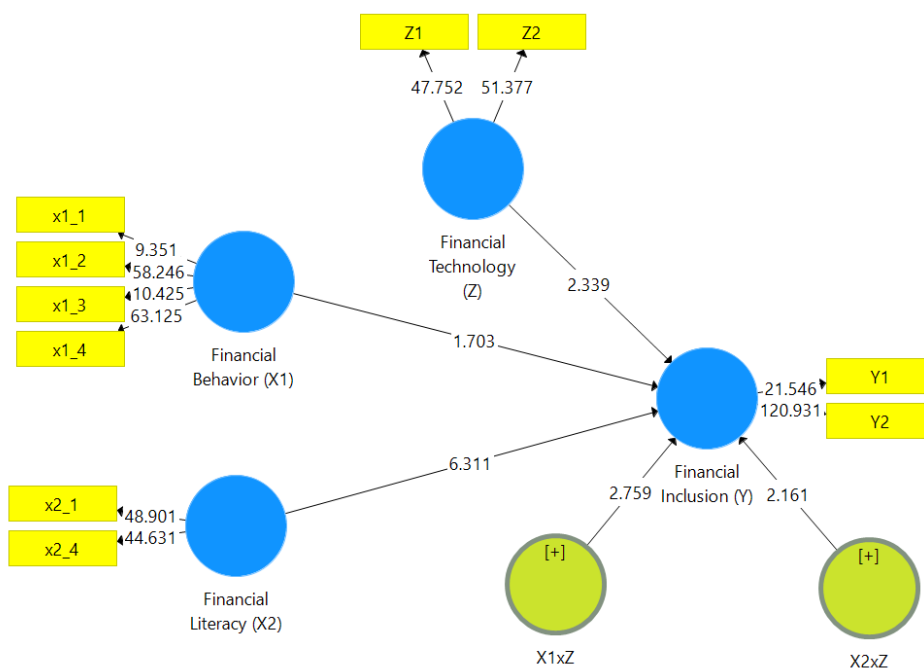


Figure 1. Hypothesis Testing Results

The Effect of Financial Behavior on Financial Inclusion

The results obtained in this study explain that financial behavior does not affect financial inclusion, this result can be seen with a p value of 0.089. Financial behavior does not affect financial inclusion because of several factors such as limited access to financial services, limited knowledge about financial products, low income levels, and distrust of financial institutions according to research (Trevio Julian Djakarta et al., 2023).

The Effect of Financial Literacy on Financial Inclusion

The results obtained in the study explain that financial literacy has a positive influence on financial inclusion, this result can be seen with a p value of 0,000. This explains, the more people who know about financial products and use these financial products, the more they will achieve inclusive finance in Indonesia (Putu et al., 2020). Good financial literacy skills possessed by MSMEs will help MSMEs in determining financial decisions in carrying out their business (Laga et al., 2023). Financial literacy plays a role in strengthening financial inclusion for MSMEs. With the right financial knowledge and skills, MSMEs can access various financial services, make better management on their business, and take advantage of growth opportunities, which ultimately contribute to broad economic development.

The Effect of Financial Behavior on Financial Inclusion Moderated by Financial Technology

The results obtained in this study are that financial technology moderates between financial behavior and financial inclusion, as seen from the p value of 0.006. This explains that financial technology plays an important role in moderating financial behavior and encouraging financial inclusion. With innovation and technology that continues to develop, financial technology has the potential to change the global financial landscape and also provide benefits to all MSMEs. With existing financial technology and the features offered, it makes it easier for MSMEs to manage finances, develop savings habits, and also invest. In accordance with research conducted by (Putu et al., 2020).

The Effect of Financial Literacy on Financial Inclusion being Moderated by Financial Technology

The results obtained in this study are that financial technology moderates between financial literacy and financial inclusion, as seen from the p value of 0.031. In this case, financial technology has revolutionized the way MSMEs manage their finances. In addition to facilitating access to financial services, financial

technology also plays an active role in improving financial literacy and encouraging financial inclusion. The results of this study are supported by research conducted by (Putu et al., 2020).

References

- Apriliani, P. A., & Yudiaatmaja, F. (2022). Finance And Financial Technology on The Financial Inclusion of Students in The Bachelor of Management Study Program At The University Of Education. *Prospek: Jurnal Manajemen Dan Bisnis*, 5(1), 20–28.
- Ayuk, N. M. T., & Marta, I. N. G. M. (2019). Pengaruh Tingkat Literasi Keuangan Terhadap Kinerja Dan Keberlangsungan UMKM. Studi Kasus: UMKM Kabupaten Gianyar. *Majalah Ilmiah Untab*, 16(2), 91–158.
- Brilianti, T. R., & Lutfi, L. (2020). Pengaruh Pendapatan, Pengalaman Keuangan Dan Pengetahuan Keuangan Terhadap Perilaku Keuangan Keluarga Di Kota Madiun. *Journal Of Business and Banking*, 9(2), 197. <https://doi.org/10.14414/jbb.v9i2.1762>
- Desiyanti, R. (2016). Literasi Dan Inklusi Keuangan Serta Indeks. *Jurnal Bisnis Dan Manajemen*, 2(2), 122–134.
- Hadi, A. P., Indiyarti, D., & Miharja, D. L. (2019). Process Of Diffusion and Decision of Innovation Village Information System: Case Study in Lombok Timur District, Nusa Tenggara Barat Province. *Indonesian Journal of Socio Economics*, 1(1), 1–11.
- Hijir, P. S. (2022). Pengaruh Literasi Keuangan Terhadap Perilaku Keuangan Dengan Financial Technology (Fintech) Sebagai Variabel Intervening Pada Ukm Di Kota Jambi. *Jurnal Manajemen Terapan Dan Keuangan*, 11(01), 147–156. <https://doi.org/10.22437/jmk.v11i01.17273>
- Khairani, F., Alfarisi, M. F., Mahasiswa, M., Ekonomi, F., Andalas, U., & Dosen,). (2019). Pada Mahasiswa S1 Universitas Andalas Padang. *Jurnal Ilmiah Mahasiswa Ekonomi Manajemen*, 4(1), 360–371.
- Kholilah, N. Al, & Iramani, R. (2013). Studi Financial Management Behavior Pada Masyarakat Surabaya. *Journal Of Business and Banking*, 3(1), 69. <https://doi.org/10.14414/jbb.v3i1.255>
- Koomson, I., Villano, R., & Hadley, D. (2020). Effect Of Financial Inclusion on Poverty and Vulnerability To Poverty: Evidence Using A Multi-Dimensional Measure Of Financial Inclusion. *SSRN Electronic Journal*, January. <https://doi.org/10.2139/ssrn.3518908>
- Kusuma, H., & Asmoro, W. K. (2021). Perkembangan Financial Teknologi (Fintech) Berdasarkan Perspektif Ekonomi Islam. *ISTITHMAR: Jurnal Pengembangan Ekonomi Islam*, 4(2), 141–163. <https://doi.org/10.30762/itr.v4i2.3044>
- Laga, A., Hizazi, A., & Yuliusman. (2023). The Effect of Financial Literacy, Financial Attitude, Locus of Control, And Lifestyle on Financial Management Behavior (Case Study on Undergraduate Accounting Study Program Students Faculty of Economics and Business Jambi University). *Indonesian Journal of Economic & Management Sciences*, 1(4), 459–480. <https://doi.org/10.55927/ijems.v1i4.4977>
- Martin, M., & Soetjipto, B. E. (2022). Literatur Review: Kajian Literasi Keuangan Pada Usaha Mikro Kecil Dan Menengah (UMKM). *JURNAL SYNTAX IMPERATIF: Jurnal Ilmu Sosial Dan Pendidikan*, 2(6), 57. <https://doi.org/10.36418/syntax-imperatif.v2i6.131>
- Paramita Kisti, Wahyudi, W., & Fadila, A. (2020). Determinan Perilaku Pengelolaan Keuangan Pada Pelaku Industri Kecil Menengah. *Studi Akuntansi Dan Keuangan Indonesia*, 3(2), 213–232. <https://doi.org/10.21632/saki.3.2.213-232>
- Putu, A., Kusuma, Y., Ari, N., & Darmawan, S. (2020). Peran Financial Technology Pada UMKM: Peningkatan Literasi Keuangan Berbasis Payment Gateway. 10(2), 170–175.
- R., I. H., Majid, J., & Suhartono, S. (2022). Faktor-Faktor Yang Mempengaruhi Kinerja Perusahaan Dimoderasi Oleh Financial Technology. *JPS (Jurnal Perbankan Syariah)*, 3(2), 142–159. <https://doi.org/10.46367/jps.v3i2.785>

- Rahmayanti, W., Sri Nuryani, H., & Salam, A. (2019). Pengaruh Sikap Keuangan Dan Perilaku Keuangan Terhadap Literasi Keuangan. *Jurnal Manajemen Dan Bisnis*, 2(1). <https://doi.org/10.37673/Jmb.V2i1.267>
- Riadloh, B., & Nasution, I. H. (2023). Pengaruh Perkembangan Financial Technology (Fintech), Intellectual Capital & Literasi Keuangan Terhadap Kinerja Keuangan. *Madani: Jurnal Ilmiah Multidisiplin*, 1(7), 218–228.
- Rokhayati, I., Achadi, A., & Purnomo, S. D. (2022). Analysis Of Company Characteristics to Company Value in Manufacturing Company Sector of Consumption Goods Industry Listed in BEI. *MIMBAR: Jurnal Sosial Dan Pembangunan*, 10, 106–113. <https://doi.org/10.29313/Mimbar.V0i0.8575>
- Salman Al Farisi, Muhammad Iqbal Fasa, S. (2022). Peran UMKM (Usaha Mikro Kecil Menengah) Dalam Meningkatkan Kesejahteraan Masyarakat. *Jurnal Dinamika Ekonomi Syariah*, 9(1), 73–84.
- Sari, Y. P., Faidah, Y. A., & Yasmin, A. (2019). Aplikasi Penyusunan Laporan Keuangan Berbasis Android Sebagai Strategi Mempermudah Mengelola Keuangan Umkm di Kota Tegal. 3(3).
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2020). Handbook Of Market Research. In *Handbook of Market Research* (Issue September). <https://doi.org/10.1007/978-3-319-05542-8>
- Solihat, I. (2021). Literature Review: Peran Inklusi Keuangan Melalui Teknologi Keuangan. *Conference On Economic and Business Innovation*, 35, 1–6.
- Trevio Julian Djakaria, Lasmanah, & Susilo Setiyawan. (2023). Pengaruh Literasi Keuangan, Perilaku Keuangan, Dan Penggunaan Fintech Terhadap Peran Inklusi Keuangan. *Jurnal Riset Manajemen Dan Bisnis*, 79–85. <https://doi.org/10.29313/Jrmb.V3i2.2826>
- Yushita, A. N. (2017). Pentingnya Literasi Keuangan Bagi Pengelolaan Keuangan Pribadi. *Nominal, Barometer Riset Akuntansi Dan Manajemen*, 6(1). <https://doi.org/10.21831/Nominal.V6i1.14330>
- Zakiah Nur Azizah, Fadilah Novita Dewi, Y. P. (2022). Keberlangsungan Usaha Mikro, Kecil, Dan Menengah Di Masa Pandemi: Dukungan Kebijakan Pemerintah. *BPPK*, 15.