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# The Effect of Financial Inclusion, Literacy and Fintech on Small Business Profitability with Financial Behavior as an Intervening Variable and Financial Quotient as Moderating Variable in Ponorogo

# Ervina<sup>1</sup>, Tri Ratnawati<sup>2</sup>, Ida Ayu Sri Brahmayanti<sup>3</sup>

17 Agustus University, Surabaya, Indonesia Correspondence Authors: ervinaer@untag-sby.ac.id

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### **Abstract**

This research is focused on small businesses, as the growth of small businesses is a source of economic income in the Ponorogo City sub-district. The sales profit generated by small businesses each month is still relatively small and often decreases. These conditions reflect that the ability to generate profits in small businesses has not shown an increase in sales profit. This study aims to analyze the effect of financial inclusion, financial literacy, and fintech on small business profitability, with financial behavior as an intervening variable and financial quotient as a moderating variable, in the Ponorogo City District. The study sample consisted of 112 small businesses in the Ponorogo City District. The study employed the Smart Partial Least Square (PLS) method with an outer model and inner model test analysis. The results of this study indicate that financial inclusion has a significant effect on profitability, financial literacy has no significant effect on financial behavior, financial literacy has a significant effect on profitability, financial literacy has no significant effect on financial quotient cannot moderate the effect of financial inclusion on profitability. The moderating effect of financial quotient on the relationship between financial inclusion and financial behavior, financial inclusion and profitability, financial literacy and financial behavior, financial literacy and financial behavior, financial literacy and profitability, and financial behavior, financial inclusion and profitability financial literacy and financial behavior, financial literacy and profitability, and financial behavior, financial literacy and profitability and financial behavior.

Keywords: Financial Inclusion, Financial Literacy, Fintech, Profitability, Financial Behavior, Financial Quotient

### INTRODUCTION

As documented by the Central Statistics Agency (BPS), the number of Micro, Small and Medium Enterprises (MSMEs) in Ponorogo Regency was recorded at 31,328 in 2019. This figure increased by 11.81% to 35,025 in 2020, despite the occurrence of the pandemic. In 2021, the number of MSMEs increased once more, by 9.57%, reaching 38,387. In 2022, the number of MSMEs in Ponorogo Regency increased once more, by 3.28%, reaching 39,650. However, in 2023, the number decreased by 2%. Thus, the final number was 31,720 MSMEs. From 2019 to 2022, MSMEs in Ponorogo exhibited substantial growth. However, in 2023, they experienced a notable decline. This was influenced by several factors that impeded the growth and sustainability of MSMEs in Ponorogo.

Tabel 1. Number of MSMEs in Ponorogo Regency 2019-2023

| Period | Total MSME | Progress(%) |
|--------|------------|-------------|
| 2019   | 31.328     | -           |
| 2020   | 35.025     | 11,81%      |
| 2021   | 38.387     | 9,57%       |
| 2022   | 39.650     | 3,28%       |
| 2023   | 31.720     | 20%         |

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Based on a field survey conducted by researchers, it shows that the number of Small Businesses in Ponorogo City District in 2024 is 112 business units which are divided into 11 sectors, including the following:

Tabel 2. Small Businesses per Sector in Ponorogo City District by 2024

| No | Business                                     | Total |
|----|--|-------|
| 1  | Services                                     | 10    |
| 2  | Culinary                                     | 18    |
| 3  | Distribution and Retail Trade of Basic Needs | 8     |
| 4  | Retail Trade of Building Materials           | 9     |
| 5  | Retail Trade and Automotive Services         | 4     |
| 6  | Retail Trade and Electronic Services         | 12    |
| 7  | Furniture Retail Trade                       | 6     |
| 8  | Garment Retail Trade                         | 9     |
| 9  | Beauty Retail Trade                          | 4     |
| 10 | Automotive Retail Trade                      | 14    |
| 11 | Equipment Retail Trade                       | 18    |
|    | Total  | 112   |

Based on the results of interviews with several small business actors in the Ponorogo City District, information was obtained that the sales profit generated by small businesses each month is still relatively small, unstable and often decreases, this is not comparable to the capital that has been invested by business actors. This condition reflects that the ability to generate profits in Small Businesses in Ponorogo City District is still limited and has not shown an increase in sales profit. Some of the factors that influence this include the lack of ability in financial management, including cash flow management, operational costs and investment. In Small Businesses in the Ponorogo city sub-district, there is still a practice of combining business capital and personal finances that obscure finances in the separation of cash flows, which ultimately affects business profitability due to difficulties in managing expenses and investments separately.

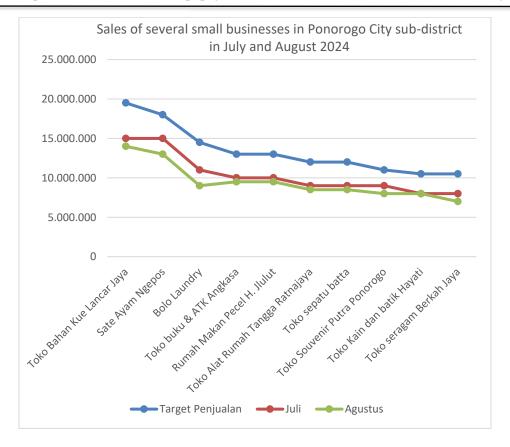


Figure 1. Sales Results from several Small Businesses in Ponorogo City District in July and August 2024

Additional contributing factors are the elevated level of market competition, which has a depressing impact on prices and profit margins, consequently affecting the profitability of small businesses. Additionally, the lack of financial inclusion, which refers to the difficulty of accessing essential financial services, such as capital loans, savings, and insurance, is a significant obstacle. The absence of product innovation and the application of new technology, as well as the lack of financial literacy, which is defined as the lack of a comprehensive understanding of financial management and investment, contribute to the inability of small business actors to make informed decisions. The prevalence of poor financial behavior among small business actors in budget management hinders their capacity to make optimal investment decisions regarding debt management.

The dearth of financial literacy among small business actors—defined as the level of understanding and ability to manage finances that allows business owners to make optimal decisions, optimize the use of capital, and minimize risk—is a significant challenge. The presence of a high financial quotient is associated with enhanced profitability and sustainable, long-term growth in small businesses. The lack of financial literacy among small business owners in the Ponorogo subdistrict hinders their ability to effectively manage their businesses. This is evidenced by the prevalence of stagnant businesses and those unable to sustain themselves, despite the challenges they face. Financial management is a crucial aspect of business operations, influencing future decisions and outcomes.

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### Literature Review

# **Financial Management**

According to Cashmere (2012), financial management includes all activities related to the acquisition, funding and management of assets, with comprehensive and comprehensive objectives. Meanwhile, according to Mulyawan (2015), financial management is a process that involves managing various financial activities or activities in an organization. This process includes various aspects, such as planning, analyzing and controlling existing finances.

# **Digitalization**

Digitalization refers to advances in digital technology that have had a significant impact, such as the use of wireless *smartphones*, internet access, web applications, mobile applications and social media. This development has enabled the creation of a more inclusive digital business, with digital technology, both growing corporations and micro, small and medium enterprises (MSMEs) now have easier access to improve their business performance and build stronger resilience (Agustin, A., Putra, G. P. E., Pramesti, D. T., & Madiistriyatno 2023).

### Stakeholder

Namrud (2021) says that *stakeholders* include all parties who have an interest and are involved in every stage of the policy development cycle. *Stakeholders* are involved in various aspects, such as advocating, implementing, and being affected, either directly or indirectly by a policy with positive or negative impacts (Namrud 2021).

# **Profitability**

According to Agustiani and Brahmayanti, (2019) say that Profitability is an indicator that reflects the company's ability to achieve profits by utilizing various resources and capabilities, such as sales activities, cash, capital, number of employees, and number of branches (Agustiani, N., & Brahmayanti 2019). There are several ways to measure profitability, one of which is through the use of profitability ratios. According to Teresya et al., (2022) said that profitability indicators are *Profit Margin, Return on Equity* and *Return on Asset* (Teresya, Rizka Rahmah Nabiilah, and Safina Tunnajah 2022).

### **Financial Inclusion**

According to Ratnawati et al., (2018) said that the existence of financial inclusion is closely related to efforts to provide access to financial services for the poor, this means presenting credit products that suit their needs, as well as creating entrepreneurial opportunities that can help improve their welfare (Ratnawati, T., Mujanah, S., & Lokajaya 2018). According to Puspitasari et al. (2020), the indicators of financial inclusion are accessibility, availability and usage of banking services.

# **Financial Literacy**

According to Putra et al., (2024) Financial Literacy is knowledge, skills and beliefs, which influence attitudes and behavior to improve the quality of decision making and financial behavior in order to achieve prosperity (Putra, R. D. S., Naufal, A., Ratnawati, T. 2024). According to Rosliyati and Iskandar, (2022) say that indicators that can measure financial literacy are general knowledge of financial management, savings and loans, insurance and investment (Rosliyati and Iskandar 2022).

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### **Fintech**

Purwanto et al., (2022) said that *Fintech* is a meeting between the financial system and technology (Purwanto, Yandri, and Yoga 2022). The growth of *Fintech* in Indonesia has driven various application innovations, especially in financial services. These innovations include tools for payment transactions, money storage, and money lending. According to Wirananda, (2022), the indicators of *Financial technology* are Fast, Efficient and Easily accessible (Wirananda 2022).

### **Financial Behavior**

Melania et al., (2020) state that financial behavior refers to financial management practices, ranging from basic money management skills to advanced financial planning activities (Tinggi Ilmu Ekonomi Pancasetia Banjarmasin, S., Ratnawati, T., & Karsudjono 2020). According to Melania et.al., (2020) measuring *Financial Behavior* with four indicators, namely paying bills on time, preparing financial plans for the future, setting aside money for savings, and managing the allocation of funds for personal and family needs.

# Financial Quotient

According to Kartika (2018) *Financial Quotient* or financial intelligence is a person's ability to understand, manage and optimize financial resources to achieve financial wellbeing. According to Vembriadiputra, (2016) says that there are three indicators to measure *Financial Quotient*, namely being able to set aside money, making a budget and improving financial information (Vembriadiputra 2016).

### RESEARCH METHOD

The population and sample in this study were 112 small businesses in Ponorogo City District.

# **Research Variables**

The independent variables of this study consist of Financial Inclusion (X1), Financial Literacy (X2), and *Fintech* (X3), while the dependent variable that is the main focus is Profitability (Y), Financial Behavior (Z) serves as an intervening variable, and *Financial Quotient* (M) serves as a moderating variable.

### **Data Source**

The data source in this study is primary data from respondents.

# **Data Collection and Data Analysis Techniques**

The data collection method used in this study is by distributing questionnaires through *Google Form* and questionnaires addressed to respondents containing a list of statements. The data analysis technique uses *Smart Partial Least Square (PLS) version 3.0* with *outer model* and *inner model* test analysis.

# RESULTS AND DISCUSSIONS

### **Outer Model Testing**

This measurement model is designed to explain the relationship between latent variables and their indicators, in this model there are two types of tests carried out to analyzed this relationship. First, *validity tests* that include *convergent validity* and *discriminant validity*, second, *reliability tests* measured using *Cronbach's Alpha* and *Composite Reliability*. Further information can be seen in the figure below:

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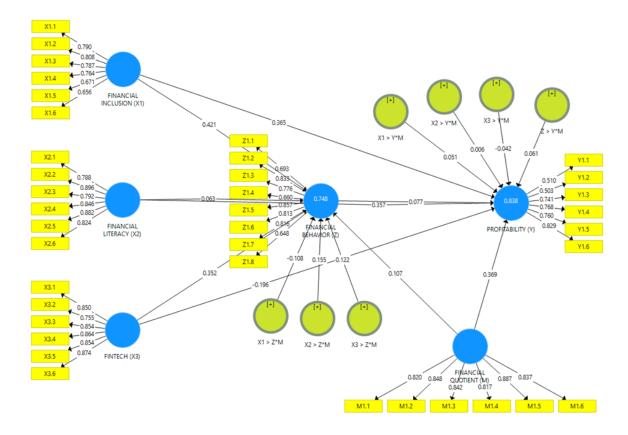


Figure 2. Outer Model

The convergent validity test uses the results of the *outer loading* value or factor loading. Indicators are declared to meet convergent validity with a good category if the *outer loading* value> 0.7. The results of *outer loading for* each variable are shown in the table below:

Table 3. *Outer Loading* Results (*Convergent Validity*)

| Variable            | Indicator | Outer Loading | Note    |  |
|---------------------|-----------|---------------|---------|--|
|                     | X1.1      | 0,790         | Valid   |  |
|                     | X1.2      | 0,808         | Valid   |  |
| Financial Inclusion | X1.3      | 0,787         | Valid   |  |
|                     | X1.4      | 0,764         | Valid   |  |
|                     | X1.5      | 0,671         | Invalid |  |
|                     | X1.6      | 0,656         | Invalid |  |
|                     | X2.1      | 0,788         | Valid   |  |
|                     | X2.2      | 0,896         | Valid   |  |
| Financial Literacce | X2.3      | 0,792         | Valid   |  |
| Financial Literacy  | X2.4      | 0,846         | Valid   |  |
|                     | X2.5      | 0,882         | Valid   |  |
|                     | X2.6      | 0,824         | Valid   |  |
|                     | X3.1      | 0,850         | Valid   |  |
| Fintech             | X3.2      | 0,755         | Valid   |  |
|                     | X3.3      | 0,854         | Valid   |  |
|                     | X3.4      | 0,864         | Valid   |  |

| -                  | X3.5         | 0,854 | Valid   |  |
|--------------------|--------------|-------|---------|--|
|                    | X3.6         | 0,874 | Valid   |  |
|                    | <b>Z</b> 1.1 | 0,693 | Invalid |  |
|                    | Z1.2         | 0,833 | Valid   |  |
|                    | Z1.3         | 0,776 | Valid   |  |
| Financial Behavior | Z1.4         | 0,660 | Invalid |  |
|                    | Z1.5         | 0,857 | Valid   |  |
|                    | Z1.6         | 0,813 | Valid   |  |
|                    | Z1.7         | 0,816 | Valid   |  |
|                    | Z1.8         | 0,648 | Invalid |  |
|                    | M1.1         | 0,820 | Valid   |  |
|                    | M1.2         | 0,848 | Valid   |  |
| Einer in Constitut | M1.3         | 0,842 | Valid   |  |
| Finacial Quotient  | M1.4         | 0,817 | Valid   |  |
|                    | M1.5         | 0,887 | Valid   |  |
|                    | M1.6         | 0,837 | Valid   |  |
|                    | Y1.1         | 0,510 | Invalid |  |
|                    | Y1.2         | 0,503 | Invalid |  |
| Profitability      | Y1.3         | 0,741 | Valid   |  |
| -                  | Y1.4         | 0,768 | Valid   |  |
|                    | Y1.5         | 0,760 | Valid   |  |
|                    | Y1.6         | 0,829 | Valid   |  |

In addition to reviewing the *loading factor* value of each indicator, it is important to assess convergent validity through the *Average Variance Extracted (AVE)* value of each construct. A construct in the *Partial Least Squares (PLS)* model is considered to meet the convergent validity criteria if its *AVE* value is greater than 0.5. Based on the *outer loading* results listed in the table above, the following is the calculation of the *AVE* value obtained:

Table 4. Average Variance Extracted (AVE) Value

| Variabel                 | Average Variance Extracted (AVE) |  |  |
|--------------------------|----------------------------------|--|--|
| Financial Inclusion (X1) | 0,693                            |  |  |
| Financial Literacy (X2)  | 0,704                            |  |  |
| Fintech (X3)             | 0,710                            |  |  |
| Financial Behavior (Z)   | 0,699                            |  |  |
| Financial Quotient (M)   | 0,709                            |  |  |
| Profitability (Y)        | 0,639                            |  |  |
| X1 > Y*M                 | 1,000                            |  |  |
| X1 > Z*M                 | 1,000                            |  |  |
| X2 > Y*M                 | 1,000                            |  |  |
| X2 > Z*M                 | 1,000                            |  |  |
| X3 > Y*M                 | 1,000                            |  |  |
| X3 > Z*M                 | 1,000                            |  |  |
| Z > Y*M                  | 1,000                            |  |  |

The measuring instrument can be said to be *reliable* if the value limit of *Construct Reliability* and *Validity: Cronbach's Alpha* and *Composite Reliability*> 0.70. *Reliability test* is conducted to measure the consistency of respondents' answers. The table below shows all *Construct Reliability* and *Validity* values: *Cronbach's Alpha* and *Composite Reliability* have a coefficient above 0.70, so that the respondents' answers are declared consistent and the research questionnaire is declared *reliable*.

Table 5. Construct Reliability Test Results

| Variabel                 | Cronbach's Alpha | Composite Reliability |  |
|--------------------------|------------------|-----------------------|--|
| Financial Inclusion (X1) | 0,852            | 0,900                 |  |
| Financial Literacy (X2)  | 0,915            | 0,934                 |  |
| Fintech (X3)             | 0,918            | 0,936                 |  |
| Financial Behavior (Z)   | 0,892            | 0,921                 |  |
| Financial Quotient (M)   | 0,918            | 0,936                 |  |
| Profitability (Y)        | 0,810            | 0,876                 |  |
| X1 > Y*M                 | 1,000            | 1,000                 |  |
| X1 > Z*M                 | 1,000            | 1,000                 |  |
| X2 > Y*M                 | 1,000            | 1,000                 |  |
| X2 > Z*M                 | 1,000            | 1,000                 |  |
| X3 > Y*M                 | 1,000            | 1,000                 |  |
| X3 > Z*M                 | 1,000            | 1,000                 |  |
| Z > Y*M                  | 1,000            | 1,000                 |  |

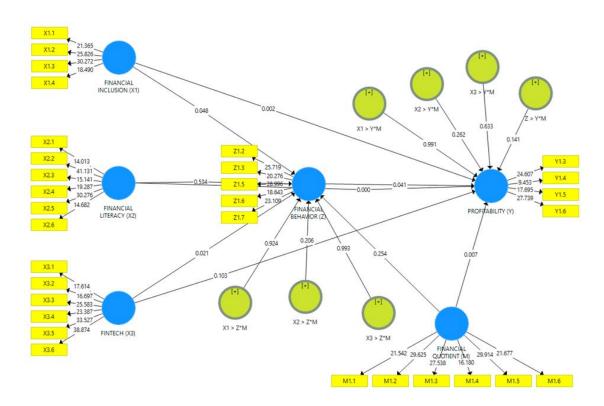


Figure 3. Inner Model (Bootstrapping)

Tabel 7. Direct Effect Result

| Variabel  | Original<br>Sample (O) | Sample<br>Mean<br>(M) | Standard<br>Deviation<br>(STDEV) | T Statistics ( O/STDEV ) | P<br>Values | Note               |
|---|------------------------|-----------------------|----------------------------------|--------------------------|-------------|--------------------|
| Financial Inclusion (X1) → Profitability (Y)                | 0,270                  | 0,285                 | 0,086                            | 3,136                    | 0,002       | Significant        |
| Financial Inclusion(X1) → Financial Behavior (Z)            | 0,263                  | 0,270                 | 0,133                            | 1,982                    | 0,048       | Significant        |
| Financial Literacy (X2) → Profitability (Y)                 | 0,485                  | 0,465                 | 0,094                            | 5,166                    | 0,000       | Significant        |
| Financial Literacy (X2) → Financial Behavior (Z)            | 0,108                  | 0,092                 | 0,173                            | 0,622                    | 0,534       | Not<br>Significant |
| Fintech (X3) $\rightarrow$ Profitability (Y)                | -0,180                 | -0,167                | 0,110                            | 1,633                    | 0,103       | Not<br>Significant |
| Fintech (X3) $\rightarrow$<br>Financial Behavior (Z)        | 0,345                  | 0,356                 | 0,149                            | 2,321                    | 0,021       | Significant        |
| Financial Behavior $(Z) \rightarrow$<br>Profitability $(Y)$ | 0,162                  | 0,160                 | 0,079                            | 2,051                    | 0,041       | Significant        |
| Financial Quotient (M) → Financial Behavior (Z)             | 0,156                  | 0,159                 | 0,137                            | 1,141                    | 0,254       | Not<br>Significant |
| Financial Quotient (M) → Profitability (Y)                  | 0,252                  | 0,249                 | 0,093                            | 2,713                    | 0,007       | Significant        |
| Moderating <i>Financial Quotient</i> X1 → Y                 | 0,001                  | -0,007                | 0,105                            | 0,012                    | 0,991       | Not<br>Significant |
| Moderating Financial Quotient $X1 \rightarrow Z$            | -0,013                 | -0,018                | 0,140                            | 0,095                    | 0,924       | Not<br>Significant |
| Moderating <i>Financial Quotient</i> X2 → Y                 | -0,090                 | -0,106                | 0,080                            | 1,122                    | 0,262       | Not<br>Significant |
| Moderating Financial Quotient $X2 \rightarrow Z$            | 0,188                  | 0,197                 | 0,149                            | 1,266                    | 0,206       | Not<br>Significant |
| Moderating <i>Financial Quotient</i> X3 → Y                 | -0,053                 | -0,032                | 0,110                            | 0,478                    | 0,633       | Not<br>Significant |
| Moderating Financial  Quotient $X3 \rightarrow Z$           | -0,001                 | -0,001                | 0,160                            | 0,009                    | 0,993       | Not<br>Significant |
| Moderating <i>Financial</i> Quotient $Z \rightarrow Y$      | 0,127                  | 0,130                 | 0,086                            | 1,474                    | 0,141       | Not<br>Significant |

Based on the test results in the table above, it can be seen that of the 14 hypotheses proposed in the study, only 5 hypotheses are accepted because they have P-Values <0.05. Meanwhile, 9 hypotheses are rejected because they have an influence indicated by the value of P - Values > 0.05 so that it can be concluded that 5 hypotheses are accepted and 9 hypotheses are rejected.

# Effect of Financial Inclusion on Profitability

The test results in the table show a positive Original Sample (O) value of 0.270 and a T-Statistic of 3.136> t-table 1.96 and a P-Values value of 0.002 <0.05, it can be concluded that Financial Inclusion has a significant positive effect on the profitability of small businesses in the Ponorogo City sub-district, so hypothesis 1 (H1) is accepted.

This finding indicates that small businesses in the Ponorogo City sub-district have understood Financial Inclusion, as it provides wider access to small business actors to obtain financial services such as loans, savings and insurance. This access allows small businesses to improve liquidity, manage cash flow better, and innovate products and services which in turn can increase operational efficiency and potential profits in small businesses.



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The results of this study are in line with research conducted by Anggraeni and Putra, (2022) which says that there is one variable out of four that serves as an indicator of inclusive finance in the user dimension, which is the basis of research related to Return on Assets (ROA) as an indicator of profitability (Anggraeni, N. D., & Putra 2022). While the Third Party Fund (DPK) variable shows a significant effect with a positive coefficient, so it plays an important role in increasing the profitability of Islamic banking. This research is not in line with research conducted by Suryani, (2021) which states that financial inclusion has a significant negative effect on bank profitability (Suryani 2021).

Financial Inclusion has a significant effect on Financial Behavior.

The test results in the table show a positive Original Sample (O) coefficient value of 0.263 and a T-Statistic of 1.982> t-table 1.96 and a P-Values value of 0.048 <0.05, so it can be concluded that Financial Inclusion has a significant positive effect on the Financial Behavior of small businesses in the Ponorogo City sub-district, so hypothesis 2 (H2) is accepted.

This finding shows that Financial Inclusion owned by small businesses in Ponorogo City sub-district affects the financial behavior of small businesses, because it provides better access to banking services and financial products that suit the needs of small businesses. With easier access to financial products such as savings, loans and digital payments, small business owners in Ponorogo City sub-district tend to be more disciplined in planning budgets, managing debt and monitoring cash flow, thus improving their ability to make wiser and more long-term and sustainable financial decisions.

The results of this study are in line with research conducted by (Jannah et al., (2023) which states that financial inclusion and income have a positive effect on the financial behavior of MSME players in the apparel business in Langsa Kota (Jannah, Fuad, and Dewi 2023).

Financial Literacy has a significant effect on Profitability.

The test results in the table show a positive Original Sample (O) coefficient value of 0.485 and a T-Statistic of 5.166> t-table 1.96 and a P-Values value of 0.000 <0.05, it can be concluded that Financial Literacy has a significant positive effect on the profitability of small businesses in the Ponorogo City sub-district, so hypothesis 3 (H3) is accepted.

This finding can be interpreted that the financial literacy possessed by small business actors in the Ponorogo City sub-district can affect the ability of small businesses to generate profits and financial literacy also has a very important role in increasing the profitability of small businesses in the Ponorogo City sub-district. Small business actors in the Ponorogo City sub-district have a good understanding of basic financial concepts, such as cash management, budget planning and tend to be able to make more informed decisions in running their business.

This research is in line with research from Endarto and Tirtana, (2020) which states that there are three indicators of financial literacy that show a positive influence on profitability. First, financial attitude plays an important role, where the higher the level of a person's financial attitude, the more profitability they achieve. Second, financial behavior also has a positive impact, the better the financial behavior, the greater the level of profitability. Third, financial knowledge contributes to profitability, the higher the level of financial knowledge, the higher the profitability that can be achieved (Endarto and Tirtana 2020).

Financial Literacy has no significant effect on Financial Behavior.

The test results in the table show a positive Original Sample (O) coefficient value of 0.108 and a T-Statistic value of 0.622 < t-table 1.96 and a P-Values value of 0.534 > 0.05, so it can be concluded that Financial Literacy has no significant effect on the Financial Behavior of small



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businesses in the Ponorogo City sub-district, so hypothesis 4 (H4) is rejected.

This finding indicates that the level of financial literacy possessed by small business owners is still insufficient to warrant a positive contribution to their financial behavior. While financial literacy is often considered an important factor in small business management, many business owners in Ponorogo City sub-district still argue that financial literacy does not necessarily have a direct impact on their financial behavior. In reality, small business owners have basic knowledge of financial concepts, but their financial behavior is often influenced by emotional factors, habits and situational pressures, preferring short-term solutions or spontaneous actions to overcome cash flow problems.

This study does not support the results of research from Wulandari et al., (2022) which states that financial literacy has a significant influence individually on student financial behavior. The elements that contribute to this study include general knowledge of personal management, loans and savings, investment, and insurance (Wulandari, Kariem, and Amaliatulwalidain 2022).

# Fintech has no significant effect on Profitability

The test results in the table show a negative Original Sample (O) coefficient value of -0.180 and a T-Statistic value of 1.633 < t-table 1.96 and a P-Values value of 0.103 > 0.05, it can be concluded that Fintech has no significant effect on the profitability of small businesses in the Ponorogo City sub-district, so hypothesis 5 (H5) is rejected.

These findings can be interpreted that the use of Fintech by small business actors is still limited and has not had a major impact on increasing profits (Profitability) in small businesses in the Ponorogo City sub-district. Fintech offers convenience in terms of financial access and payment services, but small businesses often face greater challenges in terms of business strategy, resource management and long-term planning, without improvements in these aspects, the use of fintech is not sufficient to increase the profitability of small businesses in the Ponorogo City sub-district.

This study supports Aditya and Rahmi's research, (2023) that Fintech has no significant impact on Return on Assets (ROA) and Return on Investment (ROI), which shows that the existence of fintech does not affect the amount of ROA and ROI of banks, but fintech has a negative influence on Return on Equity (ROE) (Aditya and Rahmi 2023). The negative effect does not necessarily mean that it worsens the condition, but there are several factors outside ROE that are influenced by the presence of fintech that can cause a decrease. Does not support research from Supriyadi et al., (2023) that Financial Technology has a significant effect on Financial Performance (ROA, ROE, NIM and BOPO) in banking sector companies (Supriyadi, Darmawan, J. 2023).

### Fintech has a significant effect on Financial Behavior

The test results in the table show a positive Original Sample (O) coefficient value of 0.345 and a T-Statistic of 2.321> t-table 1.96 and a P-Values value of 0.021 <0.05, it can be concluded that Fintech has a significant positive effect on the Financial Behavior of small businesses in the Ponorogo City sub-district, so hypothesis 6 (H6) is accepted.

This finding indicates that the application of Fintech financial technology by small businesses in Ponorogo City Sub-district has the potential to have a significant impact on their financial behavior, especially in cash flow management and decision-making related to financing and investment, furthermore, the application of fintech provides easy access to financial services that are faster, more efficient and affordable. The existence of fintech platforms allows small businesses to access various financial products such as loans, digital payments and financial management without having to go through traditional financial institutions that usually require complicated procedures and high costs, thus allowing small businesses in the Ponorogo City subdistrict to be more flexible in managing cash flow, accelerating growth and increasing



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competitiveness in the market.

The results of this study are in line with research conducted by Putri et al., (2022) which states that Financial technology has a significant positive effect on financial behavior (Putri, Wiryaningtyas, and Pramitasari 2022). The results of this study do not support research from Haqiqi and Pertiwi, (2022) that financial technology cannot contribute to financial behavior for generation Z in UPN "Veteran" East Java students (Haqiqi, A. F. Z., & Pertiwi 2022).

### Financial Behavior has a significant effect on Profitability

The test results in the table show a positive Original Sample (O) coefficient value of 0.162 and a T-Statistic of 2.051> t-table 1.96 and a P-Values value of 0.041 <0.05, it can be concluded that Financial Behavior has a significant positive effect on the profitability of small businesses in the Ponorogo City sub-district, so hypothesis 7 (H7) is accepted.

This finding can be interpreted that good financial behavior owned by small business actors such as cash flow management, financial planning and wise investment decisions, can increase small business profitability. Well-managed financial behavior by small business actors affects the profitability of small businesses in Ponorogo City Sub-district, because efficient financial management can increase liquidity, optimize the use of capital and minimize financial risk. Small businesses in Ponorogo City sub-district that have implemented disciplined financial practices, such as regular record keeping, prudent cash flow management and operational cost control, tend to have better profit margins.

This research is in line with research from Parandy et al., (2024) which says that financial behavior, attitudes and knowledge have a major impact on profitability, financial activity has a significant positive impact on profitability, which indicates that a person's potential to achieve a higher level of profitability is directly correlated with the level of his financial behavior (Parandy et al. 2024).

Quotient does not moderate the effect of Financial Inclusion on Profitability.

The test results in the table show a positive Original Sample (O) coefficient value of 0.001 and a T-Statistic of 0.012 < t-table 1.96 and a P-Values value of 0.991 > 0.05, then Financial Inclusion with Financial Quotient as a moderating variable has no significant effect on Profitability, so hypothesis 8 (H8) is rejected.

This finding shows that although financial inclusion has a significant effect on the profitability of small businesses in Ponorogo City District, the role of financial quotient as a moderating variable does not have a significant impact on the relationship. This finding is caused by several factors including financial inclusion, which includes access to formal financial services such as loans, credit or investment products, may directly increase capital capacity and cash flow which can boost the profitability of small businesses in Ponorogo City sub-district, but the financial quotient of small business actors which measures intelligence or ability in deeper financial management has not been able to strengthen the relationship between financial inclusion and profitability of small business actors in Ponorogo City sub-district. Research on the Effect of Financial Inclusion on Profitability with Financial Quotient as moderation has not been studied by previous researchers.

Financial Quotient does not moderate the effect of Financial Inclusion on Financial Behavior

The test results in the table show a negative Original Sample (O) coefficient value of -0.013 and a T-Statistic of 0.095 < t-table 1.96 and a P-Values value of 0.924> 0.05, then Financial Inclusion with Financial Quotient as a moderating variable has no significant effect on Financial Behavior, so hypothesis 9 (H9) is rejected.



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This finding indicates that although financial inclusion has a significant effect on financial behavior, the presence of financial quotient as a moderating variable does not strengthen or influence the relationship in the context of small businesses in Ponorogo City District. This finding indicates that although access to financial services can change the financial behavior of business owners, their level of understanding or financial quotient is not enough to moderate the relationship. Research on the Effect of Financial Inclusion on Financial Behavior with Financial Quotient as moderation has never been studied by previous researchers.

Financial Quotient does not moderate the effect of financial literacy on profitability.

The test results in the table show a negative Original Sample (O) coefficient value of -0.090 and a T-Statistic of 1.122 < t-table 1.96 and a P-Values value of 0.262> 0.05, then Financial Literacy with Financial Quotient as a moderating variable has no significant effect on Profitability, so hypothesis 10 (H10) is rejected.

This finding indicates that a good understanding of basic financial concepts, such as cash management, financial planning and risk management by small businesses in Ponorogo City subdistrict can directly improve financial performance and business profitability. While financial quotient describes the ability to make more complex financial decisions, this factor has not played a sufficient role in moderating the relationship between financial literacy and profitability of small businesses in the Ponorogo City sub-district due to the limited implementation or application of deeper knowledge in financial management. Research on the Effect of Financial Literacy on Profitability with Financial Quotient as moderation has never been studied by previous researchers.

Financial Quotient does not moderate the effect of Financial Literacy on Financial Behavior

The test results in the table show a positive Original Sample (O) coefficient value of 0.188 and a T-Statistic of 1.266 < t-table 1.96 and a P-Values value of 0.206> 0.05, then Financial Literacy with Financial Quotient as a moderating variable has no significant effect on Financial Behavior, so hypothesis 11 (H11) is rejected.

This finding indicates that the financial literacy of small business owners in the Ponorogo City sub-district cannot influence financial behavior even though it is moderated by Financial Quotient. Financial literacy refers to the knowledge and skills of business actors in managing financial aspects such as budget planning, savings, investment and debt management, but even though small business actors in Ponorogo City sub-district have basic knowledge of financial concepts and knowledge, it is not always reflected in their daily financial behavior. This finding indicates that other factors, such as habits, economic conditions and limited resources, may be more dominant in influencing the financial decisions of small business owners in Ponorogo City sub-district than financial knowledge or intelligence. Research on the Effect of Financial Literacy on Financial Behavior with Financial Quotient as moderation has never been studied by previous researchers.

Financial Quotient does not moderate the effect of Fintech on Profitability

The test results in the table show a negative Original Sample (O) coefficient value of -0.053 and a T-Statistic of 0.478 < t-table 1.96 and a P-Values value of 0.633> 0.05, then Fintech with Financial Quotient as a moderating variable has no significant effect on Profitability, so hypothesis 12 (H12) is rejected.

This finding can be interpreted that the use of Fintech by small business actors in the subdistrict of Ponorogo City is still limited and has not had a major impact on increasing profits (Profitability) of small businesses, this shows that the effect of fintech on small business profitability in Ponorogo City District has no significant effect even though it is moderated by Financial Quotient.



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The utilization of financial technology and financial intelligence has potential, but other factors such as technology accessibility, financial management habits and local market conditions have more influence on the profitability of small businesses in Ponorogo City District. Research on the Effect of Fintech on Profitability with Financial Quotient as moderation has not been studied by previous researchers.

Financial Quotient does not moderate the effect of Fintech on Financial Behavior

The test results in the table show that the Original Sample (O) coefficient value is negative -0.001 and the T-Statistic is 0.009 < t-table 1.96 and the P-Values value is 0.993> 0.05, then Fintech with Financial Quotient as a moderating variable has no significant effect on Financial Behavior, so hypothesis 13 (H13) is rejected.

This finding can be interpreted that fintech has a significant influence on financial behavior, but this influence is not strengthened or moderated by Financial Quotient in small businesses in Ponorogo City. Financial technology provides greater ease and accessibility in managing finances, conducting transactions and obtaining financing, which encourages positive changes in how small businesses organize and manage their finances, but when the relationship between fintech and financial behavior is moderated by Financial Quotient, the effect becomes insignificant. Financial Quotient can help in financial decision making, but external factors and the adoption of fintech technology itself play a more important role in influencing the financial behavior of small business owners in the Ponorogo City sub-district. Research on the effect of Fintech on financial behavior with Financial Quotient as moderation has never been studied by previous researchers.

Financial Quotient does not moderate the effect of Financial Behavior on Profitability

The test results in the table show a positive Original Sample (O) coefficient value of 0.127 and a T-Statistic of 1.474 < t-table 1.96 and a P-Values value of 0.141> 0.05, then Financial Behavior with Financial Quotient as a moderating variable has no significant effect on Profitability, so hypothesis 14 (H14) is rejected.

This finding can be interpreted that financial behavior has a significant influence on the profitability of small businesses in Ponorogo City District. Disciplined and well-planned financial management by small business actors in Ponorogo City sub-district can improve financial performance and small business profits, but when this relationship is moderated by Financial Quotient, no significant effect is found. This finding indicates that although financial intelligence or understanding of financial management has the potential to influence financial decision making, Financial Quotient does not sufficiently strengthen or moderate the relationship between financial behavior and profitability of small businesses in Ponorogo City sub-district. Research on the Effect of Financial Behavior on Profitability with Financial Quotient as moderation has never been studied by researchers.

## **CONCLUSION**

Based on the results of the data analysis above, it can be concluded that Financial Inclusion has a significant effect on Profitability. Financial Inclusion has a significant impact on Financial Behavior. Financial Literacy has a significant impact on Profitability. Financial Literacy has no significant impact on Financial Behavior. Financial Behavior has a significant impact on Profitability. Financial Quotient does not moderate the effect of Financial Inclusion on Profitability. Financial Quotient does not moderate the effect of Financial Inclusion on Profitability. Financial Quotient does not moderate the effect of Financial Inclusion on Profitability. Financial Quotient does not moderate the effect of Financial Inclusion on Profitability. Financial Quotient does not moderate the effect of Financial Inclusion on Profitability. Financial Quotient does not moderate the effect of Financial Inclusion on Profitability. Financial Quotient does not moderate the effect of Financial Inclusion on Profitability. Financial Quotient



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does not moderate the effect of Fintech on Profitability, Financial Quotient does not moderate the effect of Fintech on Financial Behavior, Financial Quotient does not moderate the effect of Financial Behavior on Profitability. Implications of this research include: For small business actors, this research can be a provision for small business actors to take advantage of financial inclusion and improve financial literacy to better understand and manage financial resources wisely. Appropriate application of financial technology (fintech) can expand access to financial services, improve efficiency, and optimize cash flow management. A good understanding of the financial behavior of business actors and the ability to manage the financial quotient will strengthen business decisions, which in turn can promote sustainable and long-term improvement in the profitability of small businesses. For further researchers, the sample in this study can be expanded not only in the scope of the city sub-district. In further research, it is better to use the financial quotient variable as a direct variable on profitability because based on the hypothesis, financial quotient has more direct influence on profitability than as a moderating variable.

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