



Entrepreneurial orientation and emotional bias in MSMEs' financing and performance

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ABSTRAK

Banyak studi mengenai dinamika perkembangan usaha mikro, kecil dan menengah (UMKM) telah dilakukan. Akan tetapi, masih terdapat beberapa celah penelitian yang menarik untuk dieksplorasi lebih lanjut. Untuk itu, tujuan dari penelitian ini adalah untuk menguji faktor-faktor determinan orientasi kewirausahaan dan informasi asimetris yang mempengaruhi bias emosi pengusaha, serta hubungan variabel-variabel tersebut dengan pembiayaan dan kinerja UKM. Objek penelitian ini adalah UMKM yang terkenal di empat kelurahan di Kota Salatiga - Jawa Tengah yang bergerak dalam berbagai sektor, seperti sektor makanan dan minuman, industri jasa, perdagangan, dan hortikultura. Data yang diperoleh diolah dengan menggunakan perangkat lunak Partial Least Square (PLS). Hasil analisis data menunjukkan bahwa orientasi kewirausahaan berpengaruh positif terhadap bias emosional pengusaha UMKM. Selanjutnya, informasi asimetris berpengaruh positif terhadap bias emosi. Sedangkan bias emosional berpengaruh positif terhadap pembiayaan, dan pembiayaan berpengaruh positif terhadap kinerja perusahaan. Secara umum, hasil penelitian ini menyarankan pentingnya aspek perilaku (bias emosi) dalam menjelaskan kinerja UMKM melalui dampak tidak langsungnya ke kinerja melalui pembiayaan.

ABSTRACT

There have been numerous studies investigating the dynamics of micro, small and medium enterprises (MSME) development.

However, this research topic still offers several interesting research gaps to be explored. Accordingly, the purpose of this research is to test the effects of entrepreneurial orientation and asymmetric information that affect MSME entrepreneurs' emotional biases, as well as the relationships between these variables and MSME's financing and performance. Our research objects are MSMEs located in four urban villages in Salatiga City, Central Java that engage in various business sectors, such as the food and beverage, the service industry, the grocery, and the horticulture sector. We analyze the research data with the Partial Least Square (PLS) software. The research results reveal that entrepreneurial orientation and asymmetric information positively influence MSME entrepreneurs' emotional bias. Meanwhile, emotional bias has a significantly positive influence on financing. Finally, we also find that financing positively affects MSMEs' performance. In sum, our study demonstrates the importance of the behavioral aspect (emotional bias) in explaining MSMEs' performance through its indirect impact through financing.

INTRODUCTION

Many micro, small, and medium enterprises (MSMEs) suffer from ineffective financial management (Karadag, 2015). Many factors explain this problem. For example, MSME owner-managers are often less professional in making financial decisions (Kapoor et al., 2015). They also lack financing access due to low financial literacy (Oseifuah, 2010). Lastly, they may have different preferences and low entrepreneurial skills (Rezaei et al., 2012). Consequently, entrepreneurs often cannot make optimal for their firms. MSMEs in Salatiga City also suffer from this problem, although MSMEs play a strategic role in this city's economic development (Bappeda Salatiga, 2019). The evidence supports the argument that MSMEs lack financing access (Adam & Lestari, 2017) that erodes their competitiveness (Anton et al., 2015).

Financing is crucial in firms' business cycle. No certain financing strategy or model can be implemented for each firm condition. Each firm has different financial patterns for each life cycle, from the initial to maturity stage (Koch et al., 2010). Entrepreneurs who fail to identify the appropriate financing patterns will harm their firms. A likely factor that is likely related to suboptimal financing is MSME entrepreneurs' entrepreneurial aspect. Entrepreneurs need to be skillful in identifying (human resource development and new business) opportunities in managing their firms (Allinson et al., 2000). The entrepreneurial process combines and deploys these resources to create new creativity (Baker & Nelson, 2005).

Entrepreneurs generally seek to convince potential investors by providing accurate information on business projections. However, their emotional biases may

reduce the accuracy of the information, including estimating business risks lower than the actual ones, predicting shorter initial investment return periods, and overestimating small firms' probability of market success (Adomdza et al., 2016). Entrepreneurs frequently make mistakes in their newly formed firms' financial planning, leading to cash flow failure and even threatening their business continuity. They make such problems due to the emotional aspects that dominate their decision-making processes, including underestimating risks and expenditures, overestimating business and sales prospects, and estimating investment return periods very confidently (Dunn & Liang, 2015). Our focus on the emotional aspects is relevant with prior findings that show the emotional aspects play an essential role in SMEs' decision making and certain emotional expressions likely lead to greater business success (Chan & Park, 2013; Galbraith et al., 2013; Mason et al., 2017; Mitteness et al., 2012). Podoynitsyna, Van der Bij, and Song (2012) suggest that future studies test the effects of entrepreneurs' emotional aspects on their firms' financial strategies. Specifically, the emotional bias, including planning fallacy, optimism, and overconfidence, likely explains the emotional aspects in financing decisions. MSMEs in several Asian countries face obstacles in accessing external financing that inhibit their growth (Shinozaki, 2014; Urim & Imhonopi, 2015; Wang, 2014). Hence, this study also examines the effect of financing decisions on MSME performance in Salatiga City. MSMEs in this city experience problem in financing decisions, including financial problems in this pandemic era. Nevertheless, they may suffer emotional bias in the form of excessive risk-taking behaviors (Kundori, 2020; Permana, 2020).

These arguments indicate that prior studies show inconsistent results (Belwal et al., 2012; Mallick & Yang, 2011; Ortiz-Walters & Gius, 2012). These studies suggest further research to confirm the determinants and consequences of MSME financing by collaborating the entrepreneurship and financial perspectives. Besides, to our best knowledge, few studies have included the information asymmetry variable into the financing decision antecedent model, while this problem often deters MSMEs from accessing external capital. Thus, our study offers a comprehensive analysis of the MSME financing model through the interplay between behavioral entrepreneurship and financial aspects. In the Salatiga City context, stakeholders need to mitigate MSMEs' financial problems by improving their external financing access. Accordingly, the municipal government has launched various policies regarding this issue, including establishing the Regional Financial Access Acceleration Team as a catalyst to strengthen MSMEs' capacity in accessing funding (Permana, 2020). The mismatch between financing supply and demand is closely related to information asymmetry between fund suppliers and MSMEs (Yuniarti, 2011).

Emotional bias refers to decision makers' errors because they neglect facts.

Entrepreneurs suffer emotional bias likely due to their entrepreneurial orientation. (Broihanne et al., 2014; Miller et al., 2012) find that risk-loving entrepreneurs tend to exhibit emotional bias in making decisions. Besides, information asymmetry between entrepreneurs and fund suppliers may motivate entrepreneurs to make decisions based on their emotional beliefs (Gibson & Sanbonmatsu, 2004). However, the impact of entrepreneurs' entrepreneurial orientation on emotional bias remains understudied. Prior studies find that MSMEs' financing decisions largely depend on emotion and intuition, which may affect entrepreneurs' social and environmental factors (Suryakusuma & Puryandani, 2018; Wiryaningtyas, 2016). In Salatiga City and even Indonesia, MSMEs are arguably no exception because they exhibit similar managerial characteristics. These arguments motivate us to focus on the emotional factor as the dominant factor in MSMEs' financing decisions.

Prior studies investigate the determining factors of emotional bias in decision-making. Entrepreneurial orientation increases entrepreneurs' self-confidence and optimism (Fatoki, 2012; Mohammed et al., 2016; Rezaei et al., 2012). Entrepreneurs' innovative and creative traits motivate them to take business risks more optimistically. Besides, information bias is likely the determinant of emotional bias. The absence of sufficient information makes entrepreneurs experience confirmation bias that encourages them to rely more on intuition in making decisions (Gibson & Sanbonmatsu, 2004). Besides, information asymmetry may lead to over-optimism, excessive self-confidence, and planning fallacy in decision-making processes (Adomdza et al., 2016; Peeters & Czapinski, 1990). Prior studies observe that emotional bias affects entrepreneurs when making financing decisions (Adomdza et al., 2016; Zhang & Cueto, 2017). These findings indicate that MSMEs' financing decisions tend to rely more on emotion than logical thoughts, enhancing the relevance of this study that focuses on external, and not internal, financing. External financing exhibits much greater risks and complexities and consequently is more susceptible to emotional bias.

The above research introduction and problems suggest no explanation of the relationship between entrepreneurial orientation, information asymmetry, emotional bias, financing, and MSME performance. Thus, this study seeks to test: (a) the effect of entrepreneurial orientation and information asymmetry on MSME entrepreneurs' emotional bias; (b) the effect of emotional bias on financing secured; (c) the effect of financing on MSME performance; (d) the role of emotional bias in mediating the entrepreneurial orientation-financing and asymmetric information-financing relationships; and (e) the mediating role of financing in the effect of emotional bias on MSME performance.

This study highlights the importance of emotional aspects and entrepreneurs'

characteristics in financing decisions that potentially improve business performance. These aspects are arguably relevant to MSMEs' conditions in Central Java Province, including Salatiga City, that experience declining performance and worse financing access (Rizqi, 2020). Further, we also extend the entrepreneurial finance literature, especially in venture capital and debt financing.

LITERATURE STUDY & HYPOTHESIS DEVELOPMENT

Entrepreneurial Finance Theory

We rely on the entrepreneurial finance theory to explain our research framework. This theory discusses the financial aspects of entrepreneurial activities as a response to the irrelevance of corporate finance theories in elaborating the dynamics of newly formed and small firms. This theory is the intersection of entrepreneurial and finance theories (Yazdipour, 2011). Entrepreneurship represents creative and innovative activities that produce novel products or services in the economy. Innovative entrepreneurs are more risk-loving and self-reliant that are necessary for managing firms' business and financial matters. Corporate firms are similar to entrepreneurial firms in terms of their financial decisions. However, Coleman (2004) argues that theories highlighting finances at corporate levels need to be modified in the entrepreneurial context better to explain the behaviors of small firms and their entrepreneurs. The following are crucial aspects in corporate finance that must be emphasized from the entrepreneurial finance perspective: a) financing access that remains the main obstacle; b) the life cycle theory of financing; c) information opacity; d) financing access that depends on entrepreneurs' qualification; e) no clear separation between personal and business finance; f) issue related to control and willingness to disclose information. Denis (2004) reveals that MSMEs likely exhibit greater agency problems and information asymmetry than large and established firms. Hence, it requires different approaches to explain the small business phenomenon. Both problems are evident in MSMEs' financing decisions (Fraser et al., 2015). Not all assumptions in finance theories hold in small firms, such as flexible access to external formal sources with low costs. MSMEs have greater uncertainties regarding business prospects and expected cash flows than larger and more established firms. Entrepreneurs' financing behavior often leads to irrational tendencies that behavioral finance arguably illuminates small firms' financial management. For example, to convince potential investors to invest in their firms, entrepreneurs exhibit excessively optimistic behavior and self-confidence, and planning fallacy (Adomdza et al., 2016),

and even cognitive bias (Hu & Lin, 2011).

MSME performance

MSMEs' financial performance results from their activities in managing their assets effectively during certain periods (Rudianto, 2013). Financial performance information is crucial to identify and evaluate MSME success in their operational activities. MSMEs' financial performance can be measured with their profits and total assets during certain periods (Lia, 2015; Phusavat & Jaiwong, 2008).

Financing

Financing represents MSME activities to search for funding sources to finance their business activities. MSME financing consists of debt and equity financing (Kim & Suh, 2009). Debt financing refers to borrowing mechanisms from other external parties (creditors), including banks, governments, cooperatives, or other firms. Debt financing creates commitments to pay the principals and interests during certain future periods. Meanwhile, MSMEs' equity financing relies on owners' contributions and retained earnings. In other words, equity financing represents MSMEs' internal financing. Besides, equity financing may come from other investors who invest in MSMEs (Veiga & McCahery, 2019).

Emotional Bias

Individuals' actions are not solely the products of rational thinking processes. According to the *homo sapiens* perspective, individuals sometimes act irrationally when confronted with uncertainties in making decisions that lead to suboptimal results (Baker & Nofsinger, 2011). According to Supramono et al. (2017), the sources of behavioral bias can be classified into three categories: cognitive, emotional, and social. This study specifically discusses emotional bias due to intuition, feelings, and impulses when individuals make irrational decisions that include overoptimism, overconfidence, and planning fallacy. Adomdza et al. (2016) define overoptimism as a stable tendency to expect the most profitable results; overconfidence as individuals' tendency to exaggerate their ability to achieve future success despite limited information; and planning fallacy as a tendency to exaggerate the pace and underestimate efforts necessary to complete projects.

Entrepreneurial Orientation

Entrepreneurial orientation represents entrepreneurs' traits that indicate business capacities, willingness to take risks, and being innovative and proactive (Miller, 2011). Risk-taking is defined as the willingness to take risks that as reflected by commitments to use more resources for projects with higher failure costs (Miller & Friesen, 1982). Innovation refers to firms' adoption of novel ideas or behaviors

(Ahluwalia et al., 2017). Individuals who can produce and combine novel products and ideas will realize future values. The ability to identify opportunities is crucial for entrepreneurs in generating values for their wealth. Lastly, proactive refers to anticipative posture and actions that better fit the future than competitors (Lumpkin & Dess, 2001).

Information Asymmetry

Information asymmetry also occurs in MSMEs' financing activities. In this context, information asymmetry refers to unequal access to information where a party (MSME entrepreneurs) has access to relevant information while other parties (current and potential investors) lack access to relevant information (Huang et al., 2014). Compared to large corporate firms, MSMEs have limited financing sources. Large corporations can easily access funds from capital markets or banks. However, MSMEs may have funding sources from banks or even informal sectors. Informal financing even exhibits an increasingly crucial role for MSMEs in developing countries (Lin & Sun, 2006). However, information asymmetry between potential investors and MSMEs potentially obstructs fund supply for MSMEs and increases costs of debt (Dong & Men, 2014). Small-scale firms are not required to disclose certain information that increases information asymmetry risk. The absence of relevant information for potential investors will hinder fund mobilization for MSMEs.

Information asymmetry in MSMEs' financing context includes ex-ante informational asymmetries and information asymmetry. Ex-ante informational asymmetry takes place before the financing contracts where MSMEs try to access funding from potential investors. In this situation, ex-ante informational asymmetries lead to adverse selection because entrepreneurs have more information related to business creditworthiness than potential investors (Dong & Men, 2014). Consequently, potential investors are in a less favorable position and respond to such situations by increasing interest rates to anticipate loss risks.

Information asymmetry after the financing contracts may lead to moral hazard. Fund suppliers cannot continuously supervise MSMEs' use of funds, willingness to repay, and business performance. Consequently, MSME entrepreneurs are more motivated to violate their commitments in the financing contracts and even refuse to repay their debts (Dong & Men, 2014). Accordingly, investors may engage in credit rationalization by only agreeing to give a part of MSMEs' fund demand to mitigate credit risks due to moral hazard (Wang, 2014).

Entrepreneurship Orientation and Emotional Bias

Entrepreneur orientation is related to emotional bias. Proactive, risk-loving, and aggressive individuals tend to exhibit emotional bias. Entrepreneurs with

entrepreneur orientation also have greater self-confidence than average individuals. Such entrepreneurs consider themselves capable of completing tasks quickly and accurately (Baron, 1998) that they perceive their business prospective and potential. The business world is very challenging and uncertain that it requires individuals with high entrepreneur orientation to identify opportunities. MSME entrepreneurs' entrepreneur orientation affects their self-confidence and optimism (Fatoki, 2012; Mohammed et al., 2016; Rezaei et al., 2012). Innovative, creative, and risk-taking entrepreneurial spirit unconsciously create entrepreneurs' emotional bias (Miller et al., 2012). They tend to perceive everything over-optimistically and self-confidently and consider themselves capable of solving every problem easily and quickly. On the one hand, such traits may produce novel products. On the other hand, the results differ from their prior predictions (bias).

H1: Entrepreneurial orientation positively affects emotional bias.

Information Asymmetry and Emotional Bias

Emotional bias occurs because of information asymmetry between entrepreneurs and potential investors. Entrepreneurs sometimes experience greater uncertainty regarding future business success, especially for new firms. Entrepreneurs are more likely to experience emotional bias when there is information asymmetry between potential investors and entrepreneurs. Highly optimistic individuals may suffer confirmation bias because they only focus on information that supports or confirms their beliefs and neglect information that does not support their beliefs (Gibson & Sanbonmatsu, 2004). Entrepreneurs who frequently make mistakes in making financial plans for their new firms will potentially face fatal cash flow and working capital problems (Dunn & Liang, 2015; Lamptey et al., 2020). In this respect, overconfident entrepreneurs are more willing to take riskier debt financing than equity (Azouzi & Jarboui, 2012). This behavior is also related to the fact that MSME entrepreneurs tend to be biased in making business decisions that will eventually affect their performance (Baker et al., 2018; Raveendra et al., 2018). Information asymmetry between entrepreneurs and potential investors will create excessive optimism, self-confidence, and planning fallacy (Adomdza et al., 2016; Peeters & Czapinski, 1990).

H2: Asymmetric information positively affects emotional bias.

Emotional Bias and Financing

Planning fallacy, overoptimism, and overconfidence likely affect financing decision making (Adomdza et al., 2016; Zhang & Cueto, 2017). Entrepreneurs can

attract potential investors' interests to invest by providing projected business success. However, they may suffer cognitive bias when providing such information. Entrepreneurs' emotional bias potentially creates cognitive legitimacy that indicates their various well-known skills. Their skill in attracting potential investors' interests depends on their ability to appear attractively before fund suppliers (Bohner & Dickel, 2011). Consequently, fund suppliers will recognize the existence or legitimacy of these newly formed firms (Nagy et al., 2012). Potential investors will invest when they believe that these new businesses are highly prospective (Pollack et al., 2012). In this context, persuasion is crucial in new firms (nascent venture) where information asymmetry between entrepreneurs and external parties is relatively high (Delmar & Shane, 2004). Thus, entrepreneurs' cognitive bias can affect investors in deciding to finance newly formed firms when these investors believe that those firms will succeed.

H3: Emotional bias positively affects financing.

Financing and MSME performance

Debt financing positively affects firm performance (Campello, 2006; Ortiz-Walters & Gius, 2012). Higher debts will improve firm performance. Entrepreneurs' can use additional funds from debts to facilitate firm growth. Debt requires firms to repay installments routinely that entrepreneurs are arguably more responsible in running their firms to improve firm performance. Improved performance will enhance entrepreneurs' credibility and eventually credit ratings. Venture capital is more beneficial because entrepreneurs do not have to repay the funds like debts to mitigate bankruptcy risk. This condition distributes the risks between entrepreneurs and investors. Both parties create partnership dynamics to develop firms optimally (Oranburg, 2016). Entrepreneurs who are open to novel business models and investors' business involvement will obtain valuable experience in running their businesses. They can use their connections and skills to improve firm performance, and investors are trustworthy partners to create long-term cooperation.

H4: Financing positively affects MSME performance.

Mediation Hypothesis

The behavioral finance theory's premise suggests that entrepreneurs' emotional bias affects their financing activities (Baker et al., 2018). Individuals are sometimes not fully rational in making decisions that lead to suboptimal decisions. However, in the MSMEs' financing context, emotional bias may result in positive impacts. Potential investors are more likely to invest in firms owned by entrepreneurs

who are more self-confident, optimistic, and better able to plan their businesses. Further, emotional bias is affected by entrepreneurs' entrepreneurial orientation. Risk-taking, independent, proactive, and decisive traits arguably result in positive emotion bias because of entrepreneurs' opportunistic behavior to create opportunities and value creation (Hills et al., 2005). Positive emotion bias potentially optimizes the impact of entrepreneurial orientation on financing.

H5: Emotional bias mediates the effect of entrepreneurial orientation on financing.

Information asymmetry affects MSME entrepreneurs' emotional bias (Adomdza et al., 2016; Peeters & Czapinski, 1990). The acquisition of more complete and thorough information about business conditions and prospects enhances entrepreneurs' optimism and ability to manage risk relative to external parties. Consequently, they can better submit funding proposals for their firms than entrepreneurs with low emotion bias (Hoang & Otake, 2014). Entrepreneurs can self-finance or rely on more varied and greater external capital when making capital structure decisions. Individuals who have strong emotional bias tend to choose external financing in the forms of debts or venture capital (Meier & Sprenger, 2011). Hence, emotional bias will optimize the effect of information asymmetry on MSME financing.

H6: Emotional bias mediates the effect of information asymmetry on financing.

Emotional bias positively affects MSME financing UMKM (Adomdza et al., 2016; Zhang & Cueto, 2017) and firm performance (Campello, 2006; Ortiz-Walters & Gius, 2012). These three variables can be positioned into a mediated relationship path through entrepreneurial finance. Entrepreneurs who present business plans firmly, self-confidently, and convincingly likely persuade financiers to invest. Improved financing access (in terms of amount and frequency) encourages entrepreneurs to mobilize other productive resources to create values (Duan et al., 2009). Such resource mobilization will expectedly meet market demands, improve profitability and business returns. In this respect, financing activities optimize the effect of entrepreneurs' emotional bias on performance.

H7: Financing mediates the effect of emotional bias on MSME performance.

RESEARCH METHOD

This study relies on a quantitative-positivistic approach with the research setting in Salatiga City – Central Java Province, Indonesia. The sample is selected using the purposive sampling method and judgmental sampling type. Our research

objects are SMEs operated for at least five years in various business sectors, including food and beverage, service, wholesale, and horticulture. Barkham et al. (1996) suggest that five years are sufficient to indicate that SMEs can pass the osilation/ critical phase in their business life. We obtain 77 SMEs operating in various business sectors from four urban villages in Salatiga City based on this sample criteria. This study generates primary quantitative data using the survey method and secondary data from the literature/ documents from various sources, including the Regional Office of SME and Cooperatives. This study involves exogenous and endogenous latent variables. Table 1 displays variable measurements and indicators.

We test our hypotheses using the Partial Least Squares (PLS) - Structural Equation Modelling (SEM) with the WarpPLS version 7.0. Sholihin and Ratmono (2013) elaborate analysis stages in PLS-SEM: model conceptualizing model, determining algorithm analysis method (outer and inner models), determining the resampling method, illustrating path diagram as the empirical research model, and evaluating the measurement and structural models.

Table 1 below displays the latent variables that formulate the research model and their measurements. This research has five latent variables: MSME performance, financing, and emotional bias as the endogenous variables, and entrepreneurial orientation and information asymmetry as the exogenous variables. Each latent variable is derived into dimensions to operationalize these variables by referring to the relevant literature. MSME performance has the financial dimension of profit increase and business assets (two dimensions). The entrepreneurial orientation consists of entrepreneurial emotion and entrepreneurial cognition with five indicators, while the information asymmetry dimension consists of adverse selection and moral hazard and two indicators. Next, emotional bias is reflected with three dimensions: over-optimism, overconfidence, and planning fallacy with six indicators. Lastly, financing' dimensions consist of business capital type (equity and debt) and two indicators.

Table 1
Variable Measurements

Variable	Dimension	Indicator	Reference
MSME performance	Profit increase	1. Amount of profit/ year	Phusavat & Jaiwong (2008) modification
	Asset increase	2. Amount of total assets/ year	
Entrepreneurial orientation	Entrepreneurial emotion	1. Dream 2. Need for achievement 3. Independence	Cheung & Chow (2006) modification
	Entrepreneurial cognition	1. Stock of experience 2. Business skill	Ghosh, Liang, Meng, & Chan (2001) modification
Information	Adverse selection	Information mastery	Myers & Majluf

Variable	Dimension	Indicator	Reference
MSME performance	Profit increase	1. Amount of profit/ year	Phusavat & Jaiwong (2008) modification
	Asset increase	2. Amount of total assets/ year	
asymmetry	Moral hazard	Risk-averse	(1984) modification
Emotional Bias	Overoptimism	Business prospect	Adomdza et al. (2016) modification
	Overconfidence	Perceived capability	
	Planning fallacy	Self-confidence	
Financing	Equity	General knowledge	Kim & Suh (2009) modification
		Target achievement	
	Debt	Time achievement	
		Internal capital, external capital	
		Formal debt, nonformal debt	

Figure 1 below illustrates the antecedents and consequences in the SME operational financing model between the constructs and their indicators based on testable theories.

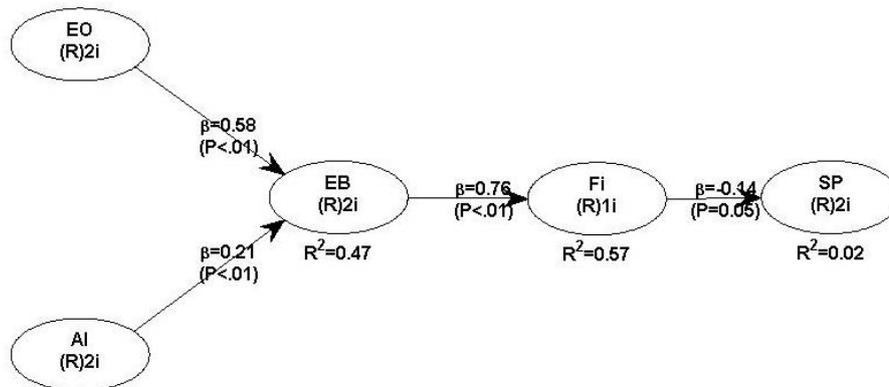


Figure 1
SME Operational Financing Model
 Source: Developed for this research (2020)

RESULTS & DISCUSSIONS

This study relies on the perception of 77 MSME entrepreneurs in Salatiga City located on Blotongan, Kauman Kidul, Salatiga, and Sidorejo Lor Urban Villages. Respondents' ages range from 27 to 62 years old, with an average age of 49 years old. A wide age range indicates that this research can capture the heterogeneity of entrepreneur respondents who may have a generation gap in managing their firms. Our respondents also have relatively long business experiences that expectedly result in

better responses. They also have a moderately different gender proportion that mitigates response bias due to the gender difference. However, our respondents have relatively diverse educational backgrounds, indicating various managerial styles that may be affected by education levels. Further, they also have various business types and scales (in terms of total capital, sales, and the number of employees) that may represent MSMEs' various business characteristics related to their business types and scales.

Table 2
Respondents' Profiles

Age (Years)	
Min	27
Max	62
Average	49
Sex	
Male	43
Female	34
Experience (Years)	
Min	5
Max	59
Average	15
Education Level	
Junior High School	11
Senior High School	35
Diploma	2
Undergraduate	8
Postgraduate (Master)	6
Others	15
Number of Employees (Persons)	
<5	57
5-10	18
>10	2
Business Type	
Culinary	33
Handy craft	28
Fashion	3
Agrobusiness	3
Automotive	1
Others	9
Business Capital (IDR)	
Min	600,000
Max	2,000,000,000

Average	40,000,000
Monthly Sales (IDR)	
< 1 million	13
1 - 5 million	27
> 5 million	37

Source: Primary Data, processed (2020)

We employ the range criteria of $[(5-1)/3]=1.3$ to investigate respondents' perceptions of the research variables. Accordingly, this study follows the following score interpretation:

1.00 – 2.33	= Low
2.34 – 3.66	= Moderate
3.67 – 5.00	= High

The following sub-sections describe each research variable.

Entrepreneurial orientation

The entrepreneurial orientation variable is measured with two indicators. Table 3 presents the survey results and descriptive statistics of the entrepreneurial orientation variable.

Table 3
Descriptive Statistics of the Entrepreneurial Orientation Variable

No	Indicator	Average Score	Criteria
1.	Entrepreneurial emotion	3.24	Moderate
2.	Entrepreneurial cognition	3.52	Moderate
Overall average		3.38	Moderate

Source: Primary Data, Processed (2020)

Table 3 informs that the average respondents' response score for the entrepreneurial orientation variable is 3.38. Specifically, the entrepreneurial cognition indicator has the highest average score (3.52), while the entrepreneurial emotion indicator has the lowest (3.24). Overall, the score interpretation of all indicators suggests that the entrepreneurial orientation variable has a moderate criterion.

Information Asymmetry

The information asymmetry is measured with two indicators. Table 4 presents the survey results and descriptive statistics of the variable.

Table 4
Descriptive Statistics of the Information Asymmetry Variable

No	Indicator	Average Score	Criteria
1.	Adverse Selection	2.64	Moderate
2.	Moral Hazard	3.30	Moderate
Overall average		2.97	Moderate

Source: Primary Data, Processed (2020)

Table 4 suggests that the average respondents' response for the information asymmetry variable is 2.97. Specifically, the moral hazard (adverse selection) indicator has the highest (lowest) score of 3.30 and 2.64, respectively. In sum, the score interpretation of all indicators demonstrates that the information asymmetry falls within the moderate criterion.

Emotional bias

The emotional bias variable is measured with six indicators. Table 5 below displays the survey results and descriptive statistics of the variable.

Table 5
Descriptive Statistics of the Emotional Bias Variable

No	Indicator	Average Score	Criteria
1.	Quickness	3.77	High
2.	Deadline	3.75	High
3.	Prospect	4.27	High
4.	Ease	3.08	Moderate
5.	Confidence	3.48	Moderate
6.	Knowledge	2.88	Moderate
Overall average		3.54	Moderate

Source: Primary Data, Processed (2020)

Table 5 shows that the average respondents' response score for the emotional bias variable is 3.54. In detail, the prospect indicator has the highest average score (4.27), and the knowledge indicator has the lowest (2.88). The score interpretation of all indicators implies that the emotional bias variable falls within the moderate criteria.

Financing

The financing variable is measured with two indicators. Table 6 illustrates the survey results and descriptive statistics of the financing variable.

Table 6
Descriptive Statistics of the Financing Variable

No	Indicator	Average Score	Criteria
1.	Equity	2.88	Moderate
2.	Debt	3.10	Moderate
Overall average		3.20	Moderate

Source: Primary Data, Processed (2020)

Table 6 suggests that the average respondents' response score for the financing variable is 3.20. In detail, the debt indicator has the highest average score (3.10) and the equity indicator the lowest (2.88). The score interpretation of all indicators implies that the financing variable falls within the moderate criterion.

MSME performance

The MSME performance variable is measured with two indicators: profit and total asset growth in the last two years. Respondents' perceptions of profit and total asset performance are classified into five criteria: (1) very low, (2) low, (3) moderate, (4) high, and (5) very high. Table 7 presents the survey results and descriptive statistics of the variable.

Table 7
Descriptive Statistics of the MSME performance Variable

No	Indicator	Average Score	Criteria
1.	Profit	3.68	High
2.	Asset	3.55	Moderate
Overall average		3.61	Moderate

Source: Primary Data, Processed (2020)

Table 7 indicates that the average respondents' response score for the MSME performance variable is 3.61. In detail, the profit indicator has the highest average score (3.68) and the asset indicator the lowest (3.55). The score interpretation of all indicators suggests that the MSME performance variable falls within the moderate criteria.

Empirical Results

Our research model consists of the following structural equation:

$$\begin{aligned}
 EB &= \alpha_1 + \beta_1 EO + \beta_2 AI + e_1 \dots\dots\dots 1 \\
 Fi &= \alpha_2 + \beta_3 EB + e_2 \dots\dots\dots 2 \\
 SP &= \alpha_3 + \beta_4 Fi + e_3 \dots\dots\dots 3
 \end{aligned}$$

Reliability and validity (outer model) measurement with reflexive variables relies on reliability indicators (loading factor value ≥ 0.7), internal consistency reliability (composite reliability value ≥ 0.7), convergent validity (average variance extracted (AVE) value ≥ 0.5), and discriminant validity (AVE root square > correlations among constructs) (Latan & Ghazali, 2016). Table 8 below presents the results of the reliability indicator analysis on the indicators of all variables.

Table 8
Loading Factor Value

Variable	Indicator	Loading Factor
Entrepreneurial Orientation (EO)	EO1 Entrepreneurial emotion	0.789
	EO2 Entrepreneurial cognition	0.996
Asymmetric Information (AI)	AI1 Adverse Selection	0.779
	AI2 Moral Hazard	0.946
Emotional Bias (EB)	EB1 Quickness	0.030
	EB2 Deadline	0.025
	EB3 Prospect	0.134
	EB4 Ease	0.385
	EB5 Confidence	0.700
	EB6 Knowledge	0.700
Financing (Fi)	Fi1 Equity	0.985
	Fi2 Debt	0.172
SMEs Performance (SP)	SP1 Profit	0.700
	SP2 Asset	0.999

Source: Primary Data, Processed (2020)

Tabel 8 informs that several indicators have loading factor values below 0.7 (EB1, EB2, EB3, EB4, and Fi2). As suggested by the rule of thumb, we then leave out these indicators. Accordingly, Table 9 below displays the loading factor, composite reliability, and AVE values for the research variables.

Table 9
Loading Factor, Composite Reliability, and Average Variance Extract Values

Variable	Indicator	Loading Factor	Composite Reliability	AVE
Entrepreneurial Orientation (EO)	Entrepreneurial emotion	0.789	0.893	0.809
	Entrepreneurial cognition	0.996		
Information Asymmetry (AI)	Adverse Selection	0.779	0.840	0.729
	Moral Hazard	0.946		
Emotional Bias (EB)	Confidence	0.700	0.700	0.521
	Knowledge	0.700		
Financing (Fi)	Equity	0.985	1	1

Variable	Indicator	Loading Factor	Composite Reliability	AVE
SMEs	Profit	0.700	0.700	0.528
Performance (SP)	Asset	0.999		

Source: Primary Data, Processed (2020)

Table 9 indicates that all indicators of the items that form the entrepreneurial orientation, information asymmetry, emotional bias, financing, and MSME performance are valid with all the loading factors are equal to or above 0.7. Hence, all indicators are considered to have good indicator reliability. The output results also suggest that the AVE values for each variable are very good (≥ 0.5) and consequently meet the convergent validity criteria. Similarly, the composite reliability scores of each variable are very good (≥ 0.7) that they meet the internal consistency reliability.

Next, Table 10 presents the results of the AVE square root with correlations between constructs.

Table 10
AVE Square Root Values and Correlations Among Variables

Construct	AVE Square Root	Correlation				
		EO	AI	EB	Fi	SP
Entrepreneurial Orientation	0.899	1	0.306	0.652	0.108	0.191
Asymmetric Information	0.854	0.306	1	0.418	0.201	0.073
Emotional Bias	0.722	0.652	0.418	1	0.720	0.149
Financing	1.00	0.108	0.201	0.720	1	0.064
SMEs Performance	0.727	0.191	0.073	0.149	0.064	1

Source: Primary Data, Processed (2020)

Table 10 above informs that each variable's AVE square root values are greater than the correlations between variables, implying good discriminant validity.

Evaluation of Structural Model

As illustrated in Table 11, we evaluate the goodness of fit of the research model before evaluating the relationships between variables.

Table 11
The goodness of Fit of the Structural Model

Criteria	Parameter	Rule of Thumb
Average path coefficient (APC)	0.421, P<0.01	Acceptable P < 0.05
Average R-squared (ARS)	0.354, P<0.01	Acceptable P < 0.05
Average adjusted R-squared (AARS)	0.343, P<0.01	Acceptable P < 0.05
Average block VIF (AVIF)	1.168	acceptable if ≤ 5 , ideally ≤ 3.3

Criteria	Parameter	Rule of Thumb
Average full collinearity VIF (AFVIF)	3.814	acceptable if ≤ 5 , ideally ≤ 3.3
Tenenhaus GoF (GoF)	0.504	small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36
Sympson's paradox ratio (SPR)	1	acceptable if ≥ 0.7 , ideally = 1
R-squared contribution ratio (RSCR)	1	acceptable if ≥ 0.9 , ideally = 1
Statistical suppression ratio (SSR)	1	acceptable if ≥ 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)	0.75	acceptable if ≥ 0.7

Source: Primary Data, Processed (2020)

Table 11 suggests that the research model exhibits good fit because the p-values of APC, ARS, and AAR < 0.05 with APC value = 0.421, ARS value = 0.354, and AARS value = 0.343. Similarly, the AVIF and AFVIF values are ≤ 5 , implying no multicollinearity between indicators and exogenous variables. GoF produced is $0.504 > 0.36$, suggesting a good fit model. Further, SPR, RSCR, and SSR produce values equal to one, NLBCDR produces values of 0.75 (>0.7), implying no causality problem in the model (Latan & Ghozali, 2016). Next, Table 12 informs the estimation results of the relationships between variables and their variances.

Table 12
The Results of Relationships between Variables

Description Path	Path Coefficient	P value	R ²	Q ²
Entrepreneurial Orientation --> Emotional Bias	0.579***	<0.001		
Asymmetric Information → Emotional Bias	0.208***	0.007	0.470	0.474
Emotional Bias → Financing	0.756***	<0.001	0.571	0.570
Financing → SMEs Performance	0.141**	0.048	0.020	0.028

significance ***/**/* = $<0.01/<0.05/<0.1$

Source: Primary Data, Processed (2020)

Figure 2 illustrates the estimation results of the relationships between variables and their variances.

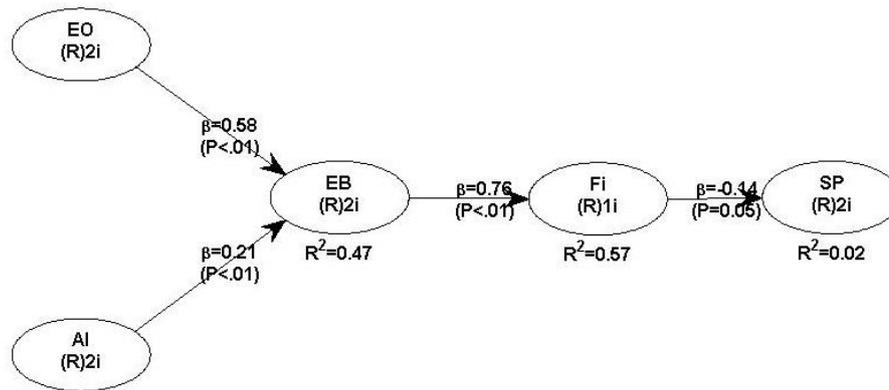


Figure 2
Significance of the Relationships between Variables in the Path Diagram Model
 Source: Primary Data, Processed (2020)

Table 12 and Figure 2 above indicate the R-squared (R^2) value of the variance is 0.47, implying that the variances of entrepreneurial orientation and information asymmetry on emotional bias are 47 percent. The R-squared (R^2) value of the variance that affects financing is 0.57 (the effect of the emotional bias' variance on the financing variance is 57 percent). Further, the R-squared (R^2) value of the variance that affects MSME performance is 0.02. The R-squared (R^2) values of the variances that affect emotional Bias and financing are considered strong because $R^2 > 0.45$. However, the R-squared (R^2) values of the variances that affect MSME performance are considered weak ($R^2 < 0.25$) (Latan & Ghozali, 2016). Next, the Q-Squared values for all variables exhibit predictive relevance because the values are greater than zero (>0) (Latan & Ghozali, 2016).

Table 12 and Figure 2 suggest that all four hypotheses are empirically supported. Specifically, entrepreneurial orientation positively affects emotional bias with the path coefficient value of 0.579 and p-value < 0.01 . For hypothesis 2, the information asymmetry variable positively affects emotional bias (path coefficient value = 0.21 and p-value < 0.01). Further, the emotional bias variable positively affects financing (path coefficient value = 0.76 and p-value < 0.01). Lastly, the financing variable positively affects MSME performance (path coefficient value = 0.14 and p-value < 0.05).

Mediation Test

Our model has both direct and indirect relation paths. The indirect relation paths consist of (a) the indirect effects of entrepreneurial orientation and information asymmetry on financing through emotional bias, (b) the indirect effect of information asymmetry on MSME performance through financing, and (c) the indirect effect of

emotional bias on MSME performance through financing. Table 13 below presents the summary of the indirect effect test results.

Table 13
Indirect Effect Tests

Path	Description Path	Path Coefficient	P-Value	Conclusion
1	EO→EB → Fi	0.438	<0.01	Mediation
2	AI→EB→ Fi	0.158	<0.01	Mediation
3	EB →Fi →MP	0.107	0.037	Mediation

Source: Primary Data, Processed (2020)

Table 13 above indicates that path 1 produces a positive effect (path coefficient value = 0.438 and p-value <0.01), implying that emotional bias mediates the effect of entrepreneurial orientation on financing (H5 supported). Path 2 results in a positive effect (path coefficient value = 0.158 and p-value <0.01), suggesting that emotional bias mediates the effect of information asymmetry on financing (H6 supported). Lastly, path 3 produces the positive effect path coefficient value = 0.107 and p-value <0.05), implying that financing mediates the effect of emotional bias on MSME performance (H7 supported).

Discussion

H1 test results demonstrate that entrepreneurial orientation positively affects MSME entrepreneurs' emotional bias. These findings support Fatoki (2012); Miller et al. (2012); and Mohammed et al. (2016) and explain entrepreneurs' biased behaviors. Proactive, risk-taking, and aggressive MSME entrepreneurs exhibit emotional bias because they consider themselves capable of completing the tasks quickly and effectively (Baron, 1998). In the MSME context, they will perceive their MSMEs as having promising prospects and growth opportunities. Nevertheless, business is full of uncertainty that it requires a high entrepreneurial orientation to identify and exploit opportunities. Risk-taking and out-of-the-box individuals may exhibit irrational behaviors in making decisions and estimating opportunities (Zhang & Cueto, 2017). However, entrepreneurs need these traits to realize their business ideas. Entrepreneurs are different from ordinary people in their responses to uncertainties – they consider uncertainties valuable opportunities while others consider them losses. Dahlbom et al. (2011) and Niederle and Vesterlund (2005) argue that men tend to be more self-confident in their achievements, optimistic, challenge-loving, and capable of planning than women. This argument explains our results because men dominate our respondents (56 percent).

Besides, entrepreneurial orientation implies greater entrepreneurs' optimism and self-confidence (Fatoki, 2012; Mohammed et al., 2016; Rezaei et al., 2012),

leading to emotional bias (Miller et al., 2012). Over-optimistic and overconfident entrepreneurs will consider their business problems easily and quickly solvable. Such traits create new businesses, despite below-than-expected results.

Our empirical evidence shows that MSME entrepreneurs in Salatiga exhibit moderate entrepreneurial emotion and entrepreneurial cognition. Based on their characteristics, their entrepreneurial orientation levels may also be affected by their education levels (Cho & Lee, 2018). Most (45 percent) respondents are senior high school graduates who did not receive any formal entrepreneurship education. Consequently, they may only have moderate entrepreneurial orientation levels. Their entrepreneurial emotion and cognition imply moderate emotional bias.

Next, H2 test results demonstrate that information asymmetry positively affects MSME entrepreneurs' emotional bias. These findings are consistent with Adomdza et al. (2016); Peeters and Czapinski (1990) who observe that information asymmetry between entrepreneurs and potential investors encourages emotional bias, including optimism, overconfidence, and planning fallacy. Entrepreneurs who have more access to relevant information than potential investors are more motivated to solve business problems using existing resources. Entrepreneurs who have sufficient information for making decisions tend to exhibit emotional bias (overconfidence and over-optimism). Such conditions are also closely related to confirmation bias because entrepreneurs focus heavily on their existing information. Confirmation bias encourages entrepreneurs to disregard other information that does not support their initial thoughts.

Information asymmetry also leads to financial planning fallacy when entrepreneurs start their business, resulting in cash flow and working capital problems (Dunn & Liang, 2015; Lamptey et al., 2020). Such conditions are due to entrepreneurs' overconfidence that tend to prefer debt financing to equity (Azouzi & Jarboui, 2012). Information asymmetry also enables MSME entrepreneurs to be overoptimistic and overconfident in making operational decisions (Adomdza et al., 2016; Peeters & Czapinski, 1990) that will potentially affect MSME performance (Baker et al., 2018; Raveendra et al., 2018).

The H3 test results indicate that emotional bias positively affects MSME financing. Our findings support Zhang and Cueto (2017) and Adomdza et al. (2016) who reveal the relationship between emotional bias (overoptimism and overconfidence) and financing. Highly optimistic MSME entrepreneurs tend to make optimistic business projections with convincing calculations and argumentations. These projections will attract potential creditors and investors to lend and invest their funds to these MSMEs (Nagy et al., 2012). MSME entrepreneurs' persuasive skills

play a crucial role in financing, especially for newly established MSMEs that exhibit greater information asymmetry between entrepreneurs and fund suppliers (Delmar & Shane, 2004). Besides, their emotional bias can also form cognitive legitimacy representing their knowledge and skills that convince potential investors and creditors to finance MSMEs (Bohner & Dickel, 2011). Entrepreneurs who are overoptimistic about their business prospects arguably prefer debt financing and receive such funding more easily (Gombola & Marciukaityte, 2007).

Empirical evidence suggests that MSME entrepreneurs exhibit emotional bias, especially business prospects, speed in completing jobs, and chasing deadlines. MSME entrepreneurs with greater emotional bias are more optimistic and self-confident about their business prospects. Concerning respondents' characteristics, MSME entrepreneurs' high optimism and self-confidence may also be affected by the fact that most of them are male. Men tend to have greater optimism about future economic conditions than women (Bjuggren & Elert, 2019). Consequently, potential investors and creditors are more motivated to invest their funds in their MSMEs. Thus, emotional bias increases MSME financing.

The H4 test results show that financing positively affects MSME performance. These findings are consistent with prior studies (Anggraeni et al., 2013; Campello, 2006; Ortiz-Walters & Gius, 2012). MSMEs often have limited capital (Bygrave & Zacharakis, 2009). MSMEs that receive funding can innovate and expand their promotional and operational capacities that will eventually increase their profits, grow their businesses, and ensure their sustainability (Park et al., 2020). Besides, MSMEs with debt financing also have to pay principals and interests to creditors routinely. Hence, entrepreneurs are arguably more responsible in running their firms to improve their firm performance and repay their debts. Similarly, MSMEs with equity financing will share their returns and risks with investors that entrepreneurs seek to improve their performance to attract investors to continue investing in their firms (Oranburg, 2016).

This study reveals that emotional bias mediates the effect of entrepreneurial orientation on financing. Thus, entrepreneurial orientation (aspiration, motivation, independence in work) and entrepreneurial emotion (knowledge and skills) in managing MSMEs will increase emotional bias. Emotional bias (overoptimism, overconfidence, planning fallacy) will attract potential investors and creditors to invest their funds in MSMEs. These findings are in line with prior research (Baker et al., 2018) that shows that financing activities are affected by MSME entrepreneurs' emotional bias.

We also demonstrate that emotional bias mediates the effect of information asymmetry on MSME financing. Thus, having information about MSME conditions

and prospects will increase entrepreneurs' optimism and self-confidence. These findings support prior studies (Adomdza et al., 2016; Peeters & Czapinski, 1990) that find that information asymmetry affects entrepreneurs' emotional bias (overoptimism and overconfidence). Next, greater optimism and self-confidence attract potential investors and creditors to invest in MSMEs, eventually increasing MSME financing. These results support Meier and Sprenger (2011) who conclude that strong emotional bias motivates MSME entrepreneurs to prefer debt to equity financing.

Lastly, this study documents that financing mediates the effect of emotional bias on MSME performance. These results support Adomdza et al. (2016); Zhang and Cueto (2017) who conclude that emotional bias increases MSME financing and performance (Campello, 2006; Ortiz-Walters & Gius, 2012). MSME entrepreneurs' optimism and self-confidence in explaining their business prospects to potential investors and creditors will arguably attract fund suppliers to invest in their firms. They can mobilize other productive resources through value creation when financing access and frequency increases (Duan et al., 2009).

In sum, our results support the entrepreneurial finance theory as an intersection between entrepreneurship and finance theories (Yazdipour, 2011). The findings demonstrate information asymmetry among MSMEs, and greater information asymmetry leads to MSME entrepreneurs' emotional bias when selecting financing sources. The results are in line with Denis (2004) and Fraser et al. (2015) who conclude that MSME entrepreneurs with information asymmetry exhibit greater emotional bias. MSMEs' financing activity likely involves greater information asymmetry. The study also documents that MSME entrepreneurs exhibit excessive optimism, overconfidence, and planning fallacy to attract potential investors to invest in their firms. The findings support Adomdza et al. (2016) and Hu and Lin (2011) who observe MSME entrepreneurs' emotional and cognitive biases when selecting financing sources. Increased financing access enables MSMEs to innovate, promote, and expand and eventually improve their performance.

CONCLUSIONS & RECOMMENDATIONS

This study tests the determinants of the MSME financing model by including entrepreneurs' behavioral components and information asymmetry condition and their consequences on business performance. Our findings reveal that entrepreneurial orientation and information asymmetry positively affect MSME entrepreneurs' emotional bias. Entrepreneurs with strong spirits to start businesses and information opacity with their investors will likely exhibit emotional bias. Those with more information about their business conditions and strong entrepreneurial orientation are

more optimistic and confident in managing their firms. Meanwhile, emotional bias positively affects financing that will positively affect MSME performance.

The mediation hypothesis test results demonstrate that emotional bias mediates the effect of entrepreneurial orientation on financing. We also observe that information asymmetry increases emotional bias, and then emotional bias increase MSME financing. Besides, our results indicate that financing mediates the effect of emotional bias on MSME performance. Interestingly, emotional bias enhances MSMEs' external financing and improves financial performance (asset and profit growth). It is then evident that resources are crucial for MSME growth.

This study tests the effect of financing on performance. However, most respondents do not have sufficient and reliable financial recording that we have to measure performance with perceived asset and profit growth, and not with actual figures. We then advise future studies to focus on MSMEs with sufficient financial records that provide actual performance figures. Besides, this study focuses on a single aspect that likely affects performance (financing). Eggert et al. (2014) suggest that product and service innovation can improve business performance. Similarly, government interventions (financial and nonfinancial supports) also strengthen MSMEs (Wonglimpiyarat, 2013). Hence, future studies need to investigate the moderating effect of both variables in the financing model to optimize MSME performance.

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