International Journal of Computer Information Systems and Industrial Management Applications
ISSN 2150-7988 Volume 18(23s) 2026 pp. 143-168
https://doi.org/10.70917/ijcisim-2026-5561
Article

THE INFLUENCE OF FINANCIAL LITERACY, BUSINESS CHARACTERISTICS, ENTREPRENEURIAL CHARACTERISTICS, AND LOAN CHARACTERISTICS ON BUSINESS PERFORMANCE MEDIATED BY CREDIT ACCESS

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Abstract: This study aims to analyze the influence of financial literacy, business characteristics, entrepreneurial characteristics, and loan characteristics on business performance through credit access. The research employed a quantitative method with a survey approach. The population consisted of Micro and Small Industry actors in the textile and apparel subsector in West Java Province, with a sample of 205 respondents selected using proportionate allocation from Bandung Regency, Bogor Regency, and Bandung City. Data were collected through questionnaires developed based on indicators of financial literacy, business characteristics, entrepreneurial characteristics, loan characteristics, credit access, and business performance. Data analysis was conducted using Structural Equation Modeling with the Partial Least Squares approach (SEM-PLS) to examine the relationships among variables and to test the research hypotheses. The results show that financial literacy influences credit access; business characteristics do not influence credit access; entrepreneurial characteristics influence credit access; and loan characteristics influence credit access. Financial literacy does not influence business performance; business characteristics influence business performance; entrepreneurial characteristics influence business performance; and loan characteristics do not influence business performance. In addition, credit access acts as a mediating variable in the relationships between financial literacy, entrepreneurial characteristics, and loan characteristics with business performance, but it does not mediate the relationship between business characteristics and business performance.
Keywords: Financial Literacy, Business Characteristics, Entrepreneurial Characteristics, Loan Characteristics, Business Performance

1. Introduction

A. Background

Micro and Small Industries (MSI) play an important role in driving national economic growth. Their contribution is nolimited to increasing production value added but also includes absorbing a significant share of the workforce. In 2023, MSI businesses were able to employ 9.84 million workers. This figure indicates that MSI not only serve as the backbone of the economy but also function as a bridge for the community to gain employment and improve their welfare (Central Bureau of Statistics, 2024)

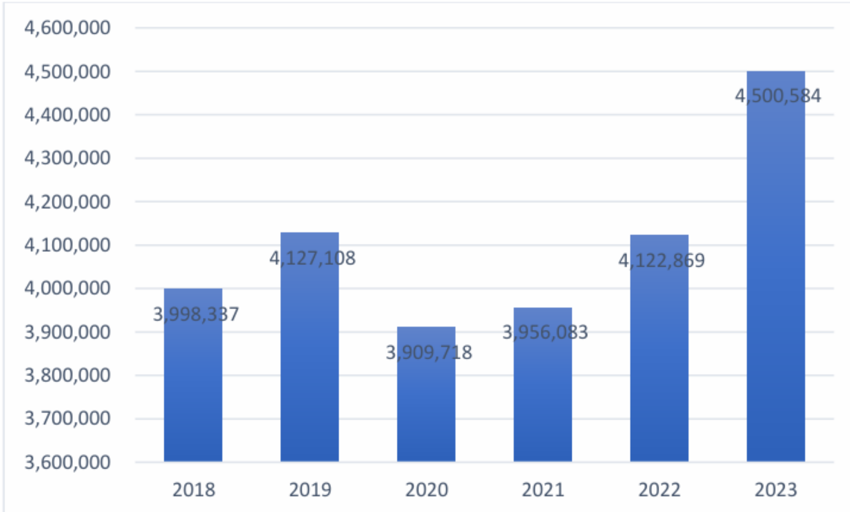

Figure 1.1 Growth of the Number of Micro and Small Industries (MSI) in Indonesia

Source: Central Bureau of Statistics, 2023 (processed)

Figure 1.1 illustrates the growth in the number of MSI businesses, which experienced a sharp decline from 2019 to 2020, followed by a consecutive increase from 2020, reaching 3.9 million businesses, and continuing to grow until 2023 with a total of 4.5 million businesses spread across both urban and rural areas. However, the distribution of MSI businesses remains uneven. The distribution of MSI businesses in 2023 can be illustrated in the following figure:

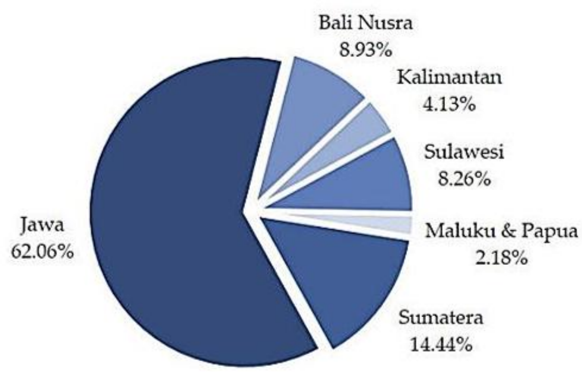

Figure 1.2 Distribution of Micro and Small Industries (MSI) by Island, 2023

Source: Central Bureau of Statistics, 2023

Figure 1.2 shows that the distribution of MSI businesses remains concentrated on the island of Java, accounting for 62.06%, followed by Sumatra at 14.44%, Bali and Nusa Tenggara at 8.93%, Sulawesi at 8.26%, and Kalimantan at 4.13%. Meanwhile, Maluku and Papua, representing the eastern region of Indonesia, have the smallest share, contributing only 2.18% of the national MSI total. This distribution indicates that Java Island has better access to resources, raw materials, and markets.

The main problem faced by MSI businesses is limited funding, with 84.77% relying on their own capital and only 15.23% obtaining capital from external sources. The largest portion of external capital comes from cooperative loans at 39.76%, followed by government program loans at 31.12%. The remainder consists of bank loans (15.05%), non-bank financial institution loans (8.46%), and private institution loans (2.22%) (Central Bureau of Statistics, 2024). These conditions reflect positive developments within the sector, yet significant challenges remain in advancing Micro and Small Industries in Indonesia.

Loan characteristics represent key attributes of credit products offered by financial institutions, including application procedures, loan requirements, interest rates, loan amounts, and repayment terms. These characteristics directly affect entrepreneurs' decisions and ability to access credit, especially for micro and small enterprises that often face obstacles such as complex requirements and high interest rates (Nguyen & Huy, 2023; Central Bureau of Statistics, 2024; Dewi et al., 2023). Nguyen & Huy (2023) emphasize that the simpler the application process, the more flexible the collateral requirements, and the more competitive the interest rates and suitability of the loan amount and repayment term to business needs, the greater the likelihood that entrepreneurs will obtain credit access. Therefore, understanding and improving loan characteristics are essential aspects of promoting financial inclusion and enhancing the performance of micro and small enterprises, as reflected in the challenges of limited credit access and capital among business actors in Indonesia.

In addition, financial literacy is also a key factor supporting entrepreneurs' ability to overcome these challenges. According to Sabana (2014), financial literacy is not only the understanding of financial concepts but also includes the ability to access financial services, comprehend relevant policies, and apply this knowledge to make sound financial decisions. Thus, financial literacy is crucial for supporting the performance and sustainability of micro and small enterprises. With a strong understanding of financial literacy, MSI entrepreneurs are expected to make better use of formal and non-formal financial access, manage their financing, and plan business finances more strategically. Strengthening financial literacy is a strategic solution to overcoming capital constraints and improving the competitiveness of enterprises that contribute significantly to local and national economic growth.

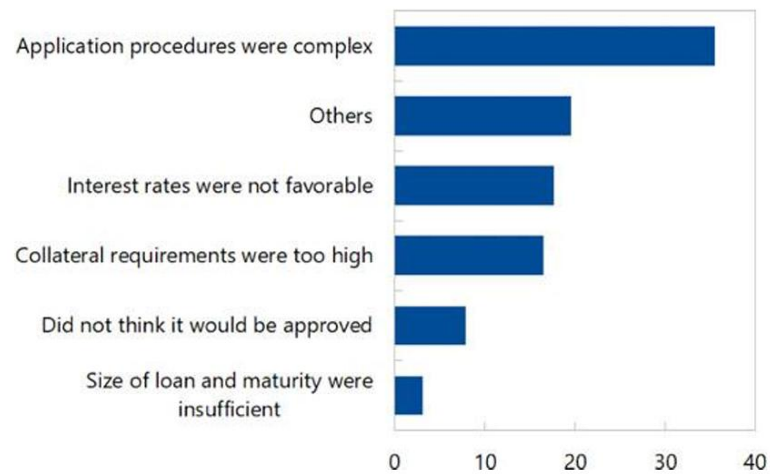

Figure 1.3 Main Reasons for Not Applying for Loans

Source: World Bank Enterprise Survey 2023; IMF Staff Estimates

According to the survey conducted by the International Monetary Fund (2023), Figure 1.3 illustrates the key factors that prevent business actors from applying for loans, with complex application procedures being the most dominant barrier. In addition, other reasons such as unfavorable interest rates and excessively high collateral requirements are also significant in influencing entrepreneurs' decisions not to borrow. Factors such as pessimism regarding loan approval and inadequate loan size and maturity are at the lowest levels, indicating that administrative aspects and requirements pose greater challenges compared to other technical factors.

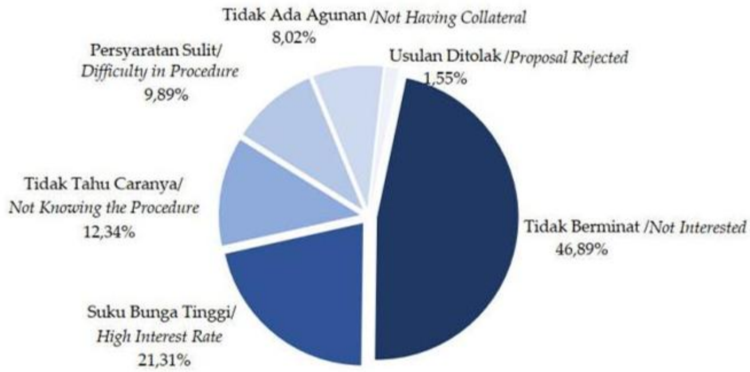

Figure 1.4 Main Reasons MSI Businesses Do Not Borrow from Banks, 2023

Source: Central Bureau of Statistics, 2024

Based on data from the Central Bureau of Statistics (2024), Figure 1.4 shows the main reasons why Micro and Small Industry (MSI) entrepreneurs do not borrow from banks. The primary reason for most MSI business owners is a lack of interest, accounting for 46.89%. Meanwhile, the remaining 53.11% is due to various constraints, including interest rates perceived as too high (21.31%), lack of knowledge about loan application procedures (12.34%), difficult requirements (9.89%), absence of collateral (8.02%), and rejection of credit proposals (1.55%).

This is concerning because many MSI businesses continue to face capital constraints that hinder their ability to grow and sustain their operations. The government has made efforts to ease access to financing through the People's Business Credit (Kredit Usaha Rakyat—KUR) program, which is specifically designed to help business actors obtain loans with more flexible requirements and competitive interest rates. The KUR program also prioritizes the manufacturing sector as one of the key industries receiving financing support (Berliansyah & Khoirunnurofik, 2023), making it an effective solution for MSI entrepreneurs in overcoming capital limitations and promoting business growth.

According to a survey by the Central Bureau of Statistics (2024), the provinces with the largest number of MSI businesses in Indonesia are East Java, Central Java, and West Java. These survey results are presented in Table 1.1 below

Table 1.1 Number of Micro and Small Industry (MSI) Businesses by Province, 2020–2023

Provinsi	Jumlah Usaha			
	2020	2021	2022	2023
Jawa Timur	828.482	762.015	874.497	977.471
Jawa Tengah	898.162	855.488	892.108	862.926
Jawa Barat	625.943	622.225	667.795	641.639

Source: Central Bureau of Statistics, 2022, 2023, 2024

Table 1.1 shows the number of Micro and Small Industries (MSI) in the three provinces with the highest MSI counts from 2020 to 2023. One province—East Java—experienced a consistent increase in the number of MSI businesses over the last three years, from 2021 to 2023. In contrast, the other two provinces, Central Java and West Java, experienced fluctuations, with both increases and decreases in the number of MSI businesses (Central Bureau of Statistics, 2022, 2023, 2024). The decline in the number of businesses in Central Java and West Java may have negative implications for overall business performance, considering that a strong MSI sector contributes significantly to employment absorption and regional economic stability. Based on these data, this study focuses on Micro and Small Industries in West Java Province.

The characteristics of the majority of MSI businesses in West Java, which are predominantly informal, relate to their legal status. Nearly 98.99% (635,213 units) of businesses in West Java do not possess a legal entity or formal business status. This reflects substantial challenges faced by MSI actors in accessing essential resources and support needed for business growth and development. Without legal status, MSI entrepreneurs face greater difficulty obtaining support from both the government and financial institutions. They must struggle independently to access the resources required to enhance their production and services.

Business characteristics are a crucial aspect influencing the growth and performance of small and medium enterprises. Woldie et al. (2008) define business characteristics as the demographic attributes of a business, including business size (number of employees or scale of operations), business age (length of operation), legal status (whether the business has formal legal recognition), and the industrial sector in which the business operates. These characteristics are considered key factors that determine the direction of business development and success, especially in micro and small enterprises that heavily rely on internal capacity and operational environments.

The phenomenon of micro and small business development in Indonesia, particularly in West Java Province, demonstrates that the majority of MSI businesses operate at a small scale, have low legal status, and span diverse industrial sectors. This aligns with the theory of Woldie et al. (2008), which emphasizes the importance of business demographic characteristics in determining opportunities for financing access and business performance. Therefore, understanding business characteristics becomes an essential foundation for analyzing the constraints and dynamics encountered by micro and small entrepreneurs in accessing financial resources and developing their businesses productively.

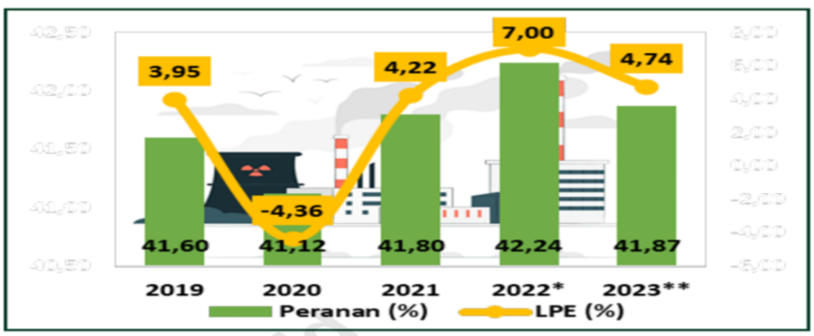

Figure 1.5 Role and Growth Rate of the Manufacturing Industry in West Java, 2019–2023 (Percent)

Source: West Java Gross Regional Domestic Product by Industry, 2019–2023

Figure 1.5 shows that the Micro and Small Industry sector—particularly the Manufacturing Industry—held the largest contribution to the Gross Regional Domestic Product (GRDP) of West Java Province in 2023, reaching 41.87% of the total GRDP. During the period 2019–2020, the role of the Manufacturing Industry declined as a result of the COVID-19 pandemic. It then increased again during 2021–2022 in line with the recovery of West Java's economic conditions after the pandemic. However, in 2023 the sector experienced another decline (Central Bureau of Statistics, 2024).

Table 1.2 Number of Micro and Small Manufacturing Industry Businesses and Workers in West Java Province, 2022

No	Industry Classification	Number of Enterprises	Workforce
1	Food and Beverage Industry	265.650	590.954

2	Tobacco Processing Industry	3.993	10.993
3	Textile and Apparel Industry	155.007	339.856
4	Leather, Leather Goods, and Footwear Industry	29.739	88.542
5	Wood Industry, Wood Products (excluding furniture)	84.946	149.605
6	Paper Industry, Paper Products; Printing and Reproduction of Recorded Media	6.819	20.523
7	Chemical, Pharmaceutical, and Traditional Medicine Industry	2.812	6.607
8	Rubber Industry, Rubber and Plastic Products	2.437	5.659
9	Non-Metallic Mineral Products Industry	26.680	109.256
10	Basic Metal Industry	66	112
11	Fabricated Metal Products; Computers, Electronic, Optical Goods; and Electrical Equipment Industry	24.786	64.410
12	Machinery and Equipment Industry	631	3.312
13	Transportation Equipment Industry	909	2.979
14	Furniture Industry	17.775	50.877
15	Other Manufacturing; Repair and Installation Services of Machinery and Equipment	45.545	73.879
Total		**667.795**	**1.517.564**

Source: Central Bureau of Statistics, 2024.

Table 1.2 shows that Micro and Small Industries (MSI) in West Java Province are dominated by three main Industrial Classification Codes (KBLI), namely the food and beverage industry (39.78%), the textile and apparel industry (23.21%), and the wood industry (12.65%). The same pattern appears in employment absorption, with the food and beverage industry employing 38.94% of workers, the textile and apparel industry 22.39%, and the wood industry 9.86%. This study focuses on the textile and apparel subsector, which is the second-largest Micro and Small Manufacturing Industry subsector in West Java Province.

Micro and Small Industries (MSI) in West Java Province serve as one of the key pillars of regional economic development, particularly the textile and apparel subsector, which contributes significantly to the Gross Regional Domestic Product (GRDP). However, MSI entrepreneurs in this sector face serious challenges, such as fluctuations in production growth, declining income, and limited access to capital, as many businesses still rely on self-financing and operate without formal legal status. In this context, entrepreneurial characteristics become a crucial factor influencing the ability of micro and small business owners to innovate, take risks, and compete aggressively in the market.

Studies by Addo & Asante (2023) and Widyastuti et al. (2023) show that there is a significant and positive relationship between financial literacy and access to finance. Herwiyanti & Rafinda (2020) also state that there is a positive relationship between financial literacy and access to bank credit, indicating that financial literacy facilitates SMEs in accessing bank loans. In contrast, the study by Twumasi et al. (2022), conducted in rural Ghana, found a nonlinear relationship between financial literacy and access to financial services. These findings indicate that financial literacy in developing countries such as Ghana does not necessarily lead to improved access to financial services.

Research on business characteristics and credit access conducted by Tran (2021) and Flaminiano & Francisco (2021) found a positive and significant relationship between business characteristics—particularly business size—and access to bank credit. Conversely, the study by Oke et al. (2020) revealed that company age, legal status, and industry significantly influence credit access, whereas business size does not have a significant effect.

Studies on entrepreneurial characteristics and credit access by Chandrayanti et al. (2019), Firnalista et al. (2020), Suryani et al. (2021), Rop et al. (2021), and Kenmegi (2023) indicate that entrepreneurial characteristics significantly affect credit access. Meanwhile, research by Ahmad et al. (2022) shows that age and education level play an important role in accessing bank financing, while gender, experience, and entrepreneurial skills do not significantly influence access to bank financing.

Research on loan characteristics as factors influencing credit access among micro and small enterprises remains limited. A study by Aidoo et al. (2023) found that cost, registration, and collateral insurance have a significant positive effect on credit access in Ghana's agricultural sector, while collateral age has a negative effect. However, loan size moderates these relationships with contrasting effects. Additionally, studies by Nguyen et al. (2023) and Msomi (2023) highlight regulatory barriers, borrowing procedures, and interest rates as key constraints limiting credit access for MSMEs in South Africa. With differing loan characteristics and regulatory conditions, this gap suggests the need for deeper and more contextualized research on loan characteristics and institutional factors in Indonesia to enhance MSME credit access effectively and sustainably (Aidoo et al., 2023; Nguyen et al., 2023; Msomi, 2023).

Research on financial literacy and business performance conducted by Ilmi et al. (2024), Tumba et al. (2022), Suwaji & Agustedi (2023), Meitriana et al. (2022), and Yakob et al. (2021) concluded that financial literacy has a significant positive influence on business performance. In contrast, Fitria et al. (2021) found that financial literacy does not influence MSME performance. Furthermore, Martinez et al. (2024) found that among the dimensions of financial literacy—knowledge, behavior, and attitude—only financial behavior has a significant positive impact on business performance, whereas financial knowledge and financial attitudes do not significantly affect business performance.

Research on business characteristics and business performance by Agarwal & Singh (2022) concluded that business characteristics influence business performance. Business size, age, and the presence of independent directors have a direct and significant effect on performance. Kartiningsih & Daryanto (2020) concluded that business characteristics—including firm age, size, liquidity, and leverage—have a significant positive effect on profitability and financial performance. Meanwhile, research by Nyabaga & Wepukhulu (2020), which examined corporate characteristics and financial performance in banks listed on the Nairobi Securities Exchange from 2010 to 2018, supports the same claim. In contrast, Sari & Rahmantika (2021) found that business characteristics do not significantly influence MSME success.

Studies on entrepreneurial characteristics and business performance conducted by Garba (2020), Sari & Rahmantika (2021), and Chandrayanti et al. (2020) show that entrepreneurial characteristics have a significant positive effect on business performance. Meanwhile, Gunawan (2024) found that entrepreneurial characteristics have a positive but insignificant effect on business performance. Kusa et al. (2021) identified combinations of previously unknown conditions leading to SME performance, with varying effects depending on the contextual factors. Specifically, the study identified the following combinations that drive performance: opportunity recognition combined with proactiveness; motivation heterogeneity combined with innovation; and risk-taking combined with proactiveness. These findings highlight the importance of integrating multiple conditions to enhance business performance.

Research on financial literacy and business performance through access to credit conducted by Shofi et al. (2022) provides insights into how MSMEs can improve business performance by enhancing financial literacy and optimizing credit access. Fikri & Nahda (2023) found that financial literacy enhances SMEs' ability to prepare financial information that supports greater access to external financing used to increase business productivity. Nkote & Jakweyo (2024) found that financial literacy alone is not sufficient to improve microenterprise performance in rural areas; microcredit access plays a crucial role in transforming financial knowledge into improved performance. Essel et al. (2019), who examined entrepreneurial characteristics, business characteristics, and institutional characteristics on the performance of small-scale enterprises in Ghana, found that operator gender, formal education attainment, and institutional variables significantly influence small enterprise performance.

Resource Dependence Theory (RDT) explains that organizations or business actors attempt to control their dependence on external resources to continue operating and achieve optimal performance. In this study, RDT is used to highlight how micro and small business actors in the textile and apparel subsector in West Java manage financial resources through financial literacy, business characteristics, and entrepreneurial traits to meet capital needs that are essential for sustaining and improving business performance (Pfeffer & Salancik, 1978). The relationship among variables in this research model is explained through the influence of financial literacy, business characteristics, entrepreneurial characteristics, and loan characteristics on credit access. Financial literacy is viewed as the business actor's ability to manage finances efficiently, whereas business and entrepreneurial characteristics represent internal capabilities that support resource optimization. Loan characteristics represent the external resources that enterprises rely on to manage operational capital (Hillman et al., 2009).

In this model, credit access functions as an important mediating variable that reflects the ability of business actors to obtain external capital. Through adequate credit access, the influence of financial literacy, business characteristics, and entrepreneurial characteristics can positively impact business performance. Based on RDT, this study emphasizes the importance of managing resources and establishing effective relationships with lenders as adaptive strategies to enhance the competitiveness and sustainability of micro and small enterprises in the textile and apparel sector (Pfeffer & Salancik, 1978; Hillman et al., 2009).

A. Phenomenon Gap

West Java's exports in December 2023 were largely driven by non-oil and gas (non-migas) exports, primarily from the manufacturing sector, which contributed up to 97.67 percent. When compared to the previous month, only the Manufacturing Industry sector experienced a decline in December 2023—falling by 6.04 percent—while other sectors recorded increases. The Oil and Gas sector, Agriculture sector, and Mining and Others sector rose by 1478.30 percent, 1.87 percent, and 6.58 percent respectively.

Cumulatively, for the period of January to December 2023 compared to the previous year, several key sectors recorded declines: the Agriculture sector decreased by 8.18 percent, the Manufacturing Industry sector decreased by 5.21 percent, and the Mining and Others sector fell by 6.91 percent. Conversely, the Oil and Gas sector experienced growth of 12.75 percent. The export structure of West Java in 2023 was dominated by processed industrial products at 98.49 percent, followed by the Oil and Gas sector at 0.97 percent, the Agriculture sector at 0.46 percent, and the Mining & Other sectors at 0.07 percent (BPS West Java Province, 2024).

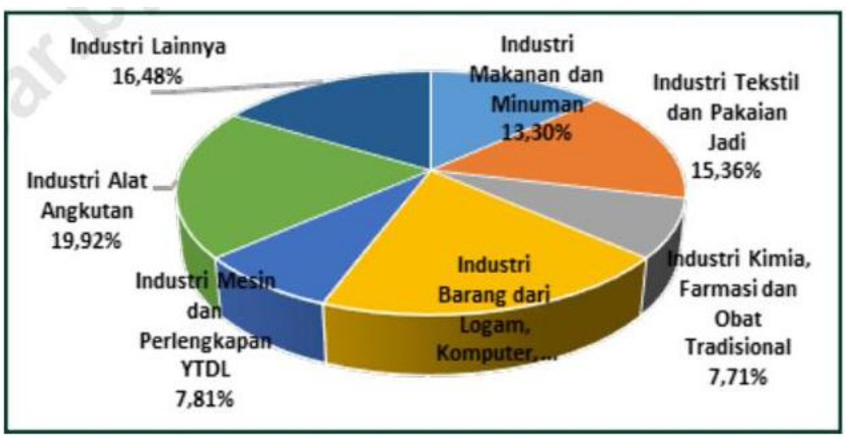

Figure 1.6 Contribution of Subcategories to the Added Value of the Manufacturing Industry Category in West Java Province

Source: Gross Regional Domestic Product of West Java by Industrial Origin, 2019–2023

Based on Figure 1.6, which illustrates the contribution of subcategories to the added value of the Manufacturing Industry category in West Java Province from 2019 to 2023, the textile and apparel industry is among the three subsectors with the largest contribution to the added value of the manufacturing sector in West Java, accounting for 15.36 percent. Nevertheless, this sector shows fluctuations in production growth, and the production growth data for the textile and apparel industry in West Java during the 2021–2023 period reflects unstable business performance dynamics.

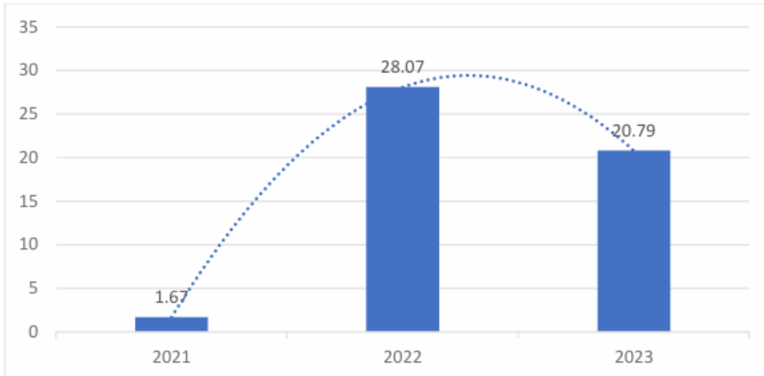

Figure 1.7 Percentage of Production Growth in the Textile and Apparel Industry in West Java Province, 2021–2023

Source: Statistics Indonesia (Badan Pusat Statistik), 2021, 2022, 2023.

As shown in Figure 1.7, production growth increased from 2021 to 2022, but experienced a decline of 7.28% in 2023. This decrease indicates the presence of issues affecting the performance of business actors in the textile and apparel industry in West Java, caused by the instability of production growth during the period (BPS, 2021; 2022; 2023).

Figure 1.8 Income of Micro and Small Industries in the Textile and Apparel Subsector, 2020–2022

Source: Statistics Indonesia (Badan Pusat Statistik), 2020, 2021, 2022

The decline and stagnation in income shown in Figure 1.8 indicate underlying problems in business performance. This is reflected in the Micro and Small Industries within the textile and apparel subsector in West Java, which experienced a significant drop in income from Rp56,744,830,270.00 in 2020 to Rp26,417,315,379.87 in 2021, followed by a relatively modest increase thereafter. This decline suggests market pressures resulting from dependence on imported raw materials, limited technological innovation, and weak competitiveness of local products, which have led to reduced production, declining demand, and the potential occurrence of layoffs (PHK). Overall, these conditions demonstrate that the businesses are facing performance challenges that may threaten business continuity and economic stability (Financial and Development Supervisory Agency, 2024).

Figure 1.9 Percentage of Income Fluctuation in the Textile and Apparel Subsector, West Java Province

Source: Statistics Indonesia (Badan Pusat Statistik), 2020, 2021, 2022.

Figure 1.9 illustrates that although the percentage trend of income growth appears to be improving, the nominal rupiah value continues to decline, indicating that the recovery in business performance within the textile and apparel industry in West Java has not been optimal. Percentage growth reflects only a relative comparison from one period to the next; therefore, when a sharp decline occurs—such as the 53.45% drop in 2020–2021—a small increase in the following year is still insufficient to lift income back to pre-crisis levels. As a result, income in nominal terms remains low because growth is calculated from a significantly reduced base following the crisis (Ministry of Trade of the Republic of Indonesia, 2023).

Consequently, most businesses in this sector continue to face operational pressures, the need to optimize efficiency, and even the risk of debt default, despite the statistical increase shown in percentage terms. When percentage growth is derived from a very low nominal baseline, its benefits for real performance indicators—such as labor absorption, investment prospects, and business expansion—remain extremely limited (Pudjaningrum & Athoillah, 2025). Thus, the seemingly positive recovery in percentage form must be interpreted critically, as it does not necessarily reflect actual improvements in sectoral health or competitiveness (Ministry of Trade RI, 2023). Therefore, sound business analysis must consider both percentage and nominal data, as they reveal a recovery process that has not yet generated substantial impact on the sustainability and overall health of textile and apparel businesses.

Every business actor, whether small or large, faces capital-related challenges at some point. In Indonesia, many MSMEs still encounter financing constraints that hinder their business development. MSME actors require additional funds to expand their operations (Dewi et al., 2023). According to data from Statistics Indonesia, West Java Province (BPS, 2021), the most common challenge encountered by Micro and Small Industries (IMK) is capital constraints, accounting for 37.79 percent. Bogor City is the region with the highest percentage of IMK experiencing capital difficulties (89.26 percent), while Tasikmalaya City has the lowest percentage at 56.30 percent.

Based on the 2021 Profile of Micro and Small Industries in West Java Province (BPS, 2021), most of the business capital of IMK originates from personal funds, accounting for 84.96 percent. Meanwhile, 15.04 percent of capital comes from external sources, consisting of bank loans (49.00 percent), personal loans (41.20 percent), government program loans (3.81 percent), cooperative loans (2.30 percent), non-bank financial institutions (1.92 percent), and private institutions (0.96 percent). Specifically for the textile and apparel subsector, more than 58.16 percent of business actors face capital constraints. Within this subsector, 106,225 enterprises rely on personal capital, 19,554 partially obtain capital from others, and 5,016 are fully dependent on external funding.

Although IMK possess substantial personal capital, they still require access to credit for several reasons. First, liquidity limitations often occur due to unstable cash flow, making credit necessary to meet daily operational needs and manage receivables and payables (Kasmir, 2019; Sutrisno, 2017; Lubis et al., 2025). Second, for business development—such as expansion, increasing production capacity, or long-term investment—additional funds are needed even when personal capital already exists (Tambunan, 2018; Kuncoro, 2018; Nurafifah et al., 2025). Third, access to credit allows IMK to optimize their capital structure by diversifying funding sources, reducing dependence on personal capital, and lowering capital costs when loan interest rates are competitive (Myers & Majluf, 1984; Modigliani & Miller, 1958; Putra & Ramadhayanti, 2024). Fourth, credit functions as a reserve to anticipate business risks and address emergencies requiring additional funds (Knight, 1921; Fadilla et al., 2025). Lastly, IMK may utilize credit to seize opportunistic opportunities, such as profitable investments or supplier discounts (Khan & Jain, 2018; Nurafifah et al., 2025).

According to Badi & Ishengoma (2021), access to debt financing is a crucial factor for improving MSME performance. Without adequate credit access, MSMEs tend to face limitations in business development, resulting in slow and suboptimal performance. This aligns with the observed significant gap between the number of businesses that successfully obtain financing and those that do not.

From the perspective of Resource Dependence Theory (RDT), IMK are organizations that rely heavily on external resources, particularly financial capital, for their survival and growth. RDT emphasizes that dependence on external resources influences the power dynamics and negotiation processes between organizations and resource providers (Pfeffer & Salancik, 1978). In other words, limited access to credit can lead to excessive dependence on personal capital, thereby reducing the flexibility and bargaining power of micro and small industries in responding to risks and business opportunities. Furthermore, restricted credit access heightens organizational risks, including liquidity difficulties and weaknesses in facing market uncertainties.

RDT suggests that diversifying resources and establishing strategic relationships with financial institutions can reduce single-resource dependence and enhance business sustainability (Hillman et al., 2009). Therefore, utilizing credit as part of the capital structure of IMK is not only a solution to liquidity issues but also a strategic approach for managing dependence on financial resources, thereby enabling sustainable improvements in business performance.

Based on the background, research gap, and empirical phenomena discussed, it can be concluded that micro and small industries (IMK) in the textile and apparel subsector in West Java Province face various structural and operational challenges that are interrelated. The key points can be summarized as follows :

1. IMK plays a crucial role in supporting the provincial economy, particularly through its contribution to GRDP and employment. However, this contribution is not matched by stable business growth, as IMK still experiences production fluctuations and a significant decline in revenue (BPS, 2024; BPKP, 2024).
2. The majority of IMK still operate informally without legal business status, limiting their access to external resources, financial facilities, and government support programs (BPS, 2021).
3. Limited business capital remains the most dominant constraint, as most IMK rely on personal funds and only a small proportion can access formal financing due to strict requirements, high interest rates, and collateral demands (BPS, 2024; Nguyen & Huy, 2023).
4. Low financial literacy restricts IMK owners' ability to manage finances, assess risks, meet lending requirements, and plan business expansion strategically (Sabana, 2014).
5. Business characteristics—such as size, age, legal status, and industry sector—significantly affect credit access and business performance. Limited understanding and poor management of these characteristics hinder IMK development (Woldie et al., 2008).
6. The performance of the textile and apparel subsector has weakened, indicated by a 7.28% decline in production in 2023 and decreasing revenue trends caused by dependence on imported raw materials, weak technological innovation, and low competitiveness of local products (BPS, 2021–2023; BPKP, 2024).
7. The decline in non-oil and gas exports, particularly from the manufacturing sector—which contributes 97.67% of West Java's total exports—has intensified pressure on IMK. The 6.04% decline in manufacturing exports in December 2023 indicates weakening global demand and domestic production (BPS West Java, 2024).

8. Government financing programs such as KUR (People's Business Credit) have not been fully utilized, although they offer low interest rates and simplified requirements. Limited awareness and unequal access remain major barriers (Berliansyah & Khoirunnurofik, 2023; BPS, 2024).
9. A significant gap exists between the potential of IMK in the textile and apparel subsector and the internal–external constraints that hinder growth. A comprehensive approach is needed, including improvements in financial literacy, strengthening business and entrepreneurial characteristics, and enhancing inclusive financing policies (Pfeffer & Salancik, 1978; Hillman et al., 2009).
10. Previous studies still show limitations, especially regarding the role of loan characteristics, institutional factors, and other variables within Indonesia's diverse contexts (Aidoo et al., 2023; Nguyen et al., 2023).
11. Resource Dependence Theory (RDT) is relevant to explain how IMK manage their dependence on external resources—particularly financing—as a strategy to enhance competitiveness and business sustainability (Pfeffer & Salancik, 1978; Hillman et al., 2009).

This study contributes several innovative aspects that strengthen its theoretical and practical significance:

1. Comprehensive integration of variables—financial literacy, business characteristics, entrepreneurial characteristics, and loan characteristics—as determinants of business performance, with credit access as a mediating variable, which has rarely been examined simultaneously in prior studies.
2. A specific focus on the local context of West Java, particularly the textile and apparel subsector which is currently experiencing production pressure, revenue decline, and limited access to financing—an empirical context that has received limited research attention.
3. Application of Resource Dependence Theory (RDT) to explain the relationship between IMK and financial institutions, offering new theoretical insights into how dependency on external financial resources affects business performance. This approach has not been widely applied in Indonesian MSME research.
4. The study not only examines direct relationships among variables, but also analyzes the mediating mechanism of credit access, providing a deeper understanding of how financing processes influence IMK business performance.

Thus, the novelty of this research lies in the combination of a specific local context, a strong theoretical approach, and comprehensive variable integration. This makes the study a valuable contribution for formulating strategies to improve the performance of micro and small industries in West Java, particularly through the role of credit access.

Based on the background described above, the author considers it important to conduct further research with the title: "The Influence of Financial Literacy, Business Characteristics, Entrepreneurial Characteristics, and Loan Characteristics on Business Performance Mediated by Credit Access (A Survey of Micro and Small Business Actors in the Textile and Apparel Subsector in West Java Province)".

2. Methodology: The Council Decision Rule

Research Design

This study aims to test the hypotheses that have been previously formulated. The research method used in this study is a quantitative approach. The quantitative method is defined as a research method based on the positivist paradigm, used to examine a particular population or sample, with data collection employing research instruments, and data analysis conducted quantitatively or statistically with the objective of testing predetermined hypotheses (Sugiyono, 2020:14).

The variables used in this study include financial literacy, business characteristics, entrepreneurial characteristics, loan characteristics, credit access, and business performance among micro and small business actors in the textile and apparel subsector in West Java Province.

This research is descriptive, verificative, and explanatory. Descriptive research aims to describe or illustrate the variables studied. Descriptive research is conducted to identify the existence of independent variables, whether one or more variables, without comparing or examining their relationship with other variables (Sugiyono, 2020:64).

Verificative research concerns problem statements that question the relationship between two or more variables (Sugiyono, 2020:65). The purpose of this approach is to determine whether a variable influences another variable.

Explanatory research is a method conducted by collecting data from samples using questionnaires, then analyzing the data through hypothesis testing to explain causal relationships between variables that influence the hypothesis (Sugiyono, 2020:68). This explanatory research aims to measure and explain the influence of financial literacy, business characteristics, entrepreneurial characteristics, and loan characteristics on business performance mediated by credit access.

The quantitative research method employed is a survey. The survey method is used to obtain data from past or present events regarding beliefs, opinions, characteristics, behaviors, variable relationships, and to test several hypotheses about sociological and psychological relationships among variables from a sample taken from a certain population (Sugiyono, 2020:64).

Research Location

The research was conducted on Micro and Small Industries (IMK) in the textile and apparel subsector in West Java Province, specifically in Bandung Regency, Bogor Regency, and Bandung City.

Population and Sample

The population of this study consists of Micro and Small Industries (IMK) in the textile and apparel subsector in West Java Province. Specifically, based on data from the West Java Provincial Office of Industry and Trade (Disperindag), the largest population of IMK in the textile and apparel subsector is located in Bandung Regency, Bogor Regency, and Bandung City, totaling 402 business units.

The sampling technique used is proportionate allocation. The determination of population and sample size is calculated using the formula by Isaac & Michael (1981:192), resulting in a sample size of 197. The proportionate allocation formula is then used to distribute the sample proportionally among sub-groups according to predetermined strata (Lavrakas, 2008). The calculation is presented as follows:

Table 2.1. Population and Sample Framework

Kab/Kota	Populasi	Sampel	Sampel Aktual
Kab. Bandung	177	$ni = \frac{177}{402}\ x\ 197 = 87$	91
Kab. Bogor	96	$ni = \frac{96}{402}\ x\ 197 = 47$	47
Kota Bandung	129	$ni = \frac{129}{402}\ x\ 197 = 63$	67
Total	**402**	**197**	**205**

Source: Disperindag (2025) and Processed Data (2025).

Data Collection Techniques

The questionnaire was developed based on the variables and dimensions/indicators used in this study. Through the questionnaires distributed to respondents, it is expected that data relevant to the dissertation topic can be obtained.

The research questionnaire consists of a structured list of questions addressed to the owners, managers, or administrators of micro and small industry businesses in the textile and apparel subsector.

Each item in the questionnaire is rated using the Likert Scale Method with five alternative responses: 1-2-3-4-5. The respondents' choices represent the score for each item. This means that the Likert scale can compare a respondent's score with the distribution of scores within the well-defined sample group. The Likert scale is designed to assess the extent to which respondents agree or disagree with the statements provided. All instrument items in this study are presented in the form of statements.

Data Processing Techniques

1. Validity Test : The research instrument is first distributed to a number of respondents to examine its validity. The validity test in this study is conducted through item-total correlation, namely by examining the consistency and correlating the scores of each question item with the overall total score, focusing on the correlation coefficient between each item and the total score.
2. Reliability Test : In this study, the reliability test is conducted to measure the questionnaire that serves as an indicator of the variables or constructs being studied. A questionnaire is considered reliable if respondents' answers to the statements remain consistent or stable over time. The level of reliability of a measurement reflects the stability and consistency of the instrument in measuring a concept. A measurement instrument is deemed reliable when the results are accurate and consistent.

Data Analysis Techniques

The data analysis techniques used to answer the research questions consist of two methods: descriptive analysis and SEM-PLS (Structural Equation Modeling–Partial Least Squares). Descriptive analysis relates to qualitative variables and aims to explore the information obtained from the study's results. Descriptive analysis is conducted using SPSS version 26.

Meanwhile, the verification analysis involves hypothesis testing through statistical tests to reveal the relationships between the research variables. Verification analysis is carried out using SEM-PLS (Structural Equation Modeling–Partial Least Squares). By combining both methods, it is expected that comprehensive solutions to the research problems can be achieved.

3. Discussion

A. The Influence of Financial Literacy on Credit Access

Financial literacy has a direct and significant effect on credit access, as evidenced by an estimate value of 0.253 (probability 0.002) with a positive direction. Based on these results, it can be concluded that the better the financial literacy of business actors, the easier it is for them to access credit from financial institutions.

The positive estimate value indicates that business owners require adequate financial knowledge to facilitate access to credit. Financial knowledge helps business actors understand information related to credit products, application procedures, and requirements such as collateral. Consequently, business actors with strong financial literacy are better able to meet the expectations of financial institutions and choose the loan amount that best suits their business needs. This condition significantly affects the frequency with which business owners access credit and ensures that the loans obtained align with what is proposed, thereby simplifying business management.

The findings of this study also support previous research on financial literacy and credit access. Studies by Widyastuti et al. (2023); Herwiyanti & Rafinda (2020); and Addo & Asante (2023) indicate that high levels of financial literacy among micro and small industry actors significantly contribute to easier access to formal financial institutions such as banks, cooperatives, and other financing institutions. However, the results of this study differ from the findings of Twumasi et al. (2022), which argue that improvements in financial literacy do not always correlate with increased access to financial services, particularly in certain developing countries.

B. The Influence of Business Characteristics on Credit Access

Business characteristics have a direct but insignificant effect on credit access, as evidenced by an estimate value of 0.120 (probability 0.174) with a positive direction. Based on these results, it can be concluded that business characteristics do not significantly contribute to facilitating credit access.

The positive estimate value is attributed to the fact that business characteristics such as business age, business size, and legal status theoretically provide an overview of a firm's readiness and capacity to manage resources and meet credit requirements. Businesses that have operated longer typically possess clearer financial histories and records, making financial institutions more confident in providing loans. Likewise, larger businesses or those with formal legal status are generally considered more stable and eligible for financing.

However, the insignificant test results indicate that business characteristics alone are not strong determinants in easing credit access, especially within the context of Micro and Small Industries. This may be due to several factors such as limited official documentation, complex banking procedures, and stringent collateral requirements that are not always feasible for business owners with certain characteristics.

The findings of this study align with Matuku et al. (2019), who stated that business characteristics such as operational duration and business volume have a positive—yet statistically insignificant—relationship with credit accessibility.

However, the findings do not support the results of several other studies. Delphin & Awolusi (2023) found that business characteristics significantly affect SME growth, with firms operating longer and located in urban areas tending to have easier credit access compared to newly established or rural-based firms. Oke et al. (2020) also found that firm age, establishment status, and industry type are important characteristics influencing SME access to bank financing, although business size was not significant. Similarly, Tran (2021) revealed that factors such as business location, equity, business plans, collateral, and project value play substantial roles in determining SMEs' ability to obtain bank credit.

Thus, although business characteristics have a positive relationship with credit access, the insignificant effect observed in this study highlights the importance of additional factors—such as financial literacy and entrepreneurial characteristics—that may strengthen a business's ability to obtain formal financing.

C. The Influence of Entrepreneurial Characteristics on Credit Access

Entrepreneurial characteristics have a direct and significant influence on credit access, with an estimate value of 0.231 (probability 0.005) in a positive direction. Based on these findings, it can be concluded that the stronger the entrepreneurial characteristics possessed by business actors, the greater their likelihood of obtaining credit access.

The positive estimate value is attributed to the fact that business actors with strong entrepreneurial traits—such as risk-taking ability, innovativeness, proactiveness, and independence—tend to be more confident and capable of managing their businesses effectively, thereby enhancing their credibility in the eyes of financial institutions. These characteristics facilitate credit access because such entrepreneurs are better able to meet administrative requirements, develop sound business plans, and utilize credit effectively for business development.

The results of this study are consistent with the findings of Suryani et al. (2021); Kenmegni (2023); Myint (2020); and Chandrayanti et al. (2020), which showed that entrepreneurial characteristics significantly affect credit access. This indicates that proactive behavior, innovativeness, and readiness to take risks—elements inherent in entrepreneurial characteristics—enhance the credibility and trust of financial institutions when providing credit.

D. The Influence of Loan Characteristics on Credit Access

The influence of loan characteristics on credit access is demonstrated by an estimate value of 0.393 with a probability of 0.000 in a positive direction, indicating that the better the loan characteristics, the greater the likelihood that business actors will obtain credit access. The positive estimate value means that loan characteristics—such as simplified loan procedures, competitive interest rates, loan amounts that match business needs, flexible loan tenors, and positive borrowing experiences—contribute to increasing the probability of businesses receiving credit.

Loan characteristics play a crucial role in determining credit access because business actors consider loan convenience and requirements as key factors. Simple and non-bureaucratic loan procedures increase the likelihood of application approval. Moreover, competitive interest rates provide an additional incentive, enabling businesses to utilize credit without facing excessive financial burdens. Appropriate loan sizes and flexible repayment periods provide greater flexibility for businesses in managing cash flows and reducing default risk. Previous borrowing experience also serves as a signal to financial institutions regarding the eligibility and creditworthiness of business actors.

The findings of this study are consistent with the research of Nguyen & Huy (2023), which emphasizes that simplified loan procedures, lenient collateral requirements, competitive interest rates, and suitable loan amounts and tenors have a strong positive effect on credit access. These results also align with Msomi (2023), who showed that competitive interest rates are an important recommendation for enhancing SME credit access. Although most loan characteristics positively and significantly influence credit access, this study differs from Aidoo et al. (2023), who found that collateral age has a negative and significant effect on credit access.

Thus, loan characteristics represent one of the key determinants that shape the ease and success of business actors in obtaining credit access.

E. The Influence of Financial Literacy on Business Performance

The influence of financial literacy on business performance is shown by an estimate value of –0.003 with a probability of 0.966 in a negative direction, indicating that financial literacy does not have a significant effect on business performance in this study. This means that an increase in the financial literacy of business actors does not directly improve business performance in a significant manner.

The negative and insignificant estimate may be attributed to several factors. Although business actors may possess adequate financial knowledge, other factors such as resource limitations, competitive business environments, and external constraints can hinder direct improvements in business performance. Financial literacy often serves more as a supporting factor through mediating variables such as credit access and financial risk management.

The findings of this study are consistent with Setiani et al. (2024), who reported that financial literacy has a negative and insignificant effect on business performance, suggesting that other organizational factors—such as leadership involvement and discipline—play a more dominant role. This result is also in line with Naufal & Purwanto (2022), who found that financial literacy does not appear to enhance the success of MSMEs.

However, these findings differ from several studies that concluded otherwise. Research by Widyastuti et al. (2023), Yakob et al. (2021), Priyantoro et al. (2023), Rahmawati et al. (2023), Usama & Yusoff (2019), and Tuffour et al. (2022) found that financial literacy has a positive and significant effect on business performance. This study also contrasts with Nkote & Jkweyo (2024), who showed that financial literacy has a significant but negative impact on business performance.

F. The Influence of Business Characteristics on Business Performance

Business characteristics have a positive and significant effect on business performance, with an estimate value of 0.210 and a probability of 0.013. This indicates that characteristics such as business age, business scale, legal status, and industry sector strongly influence business success. Businesses that have operated for a longer period tend to have more experience in managing operations, which enables them to improve performance. In addition, businesses with larger scales and clear legal status have better access to resources and greater opportunities for growth.

This finding is supported by several studies. Essel et al. (2019) found that industry type, number of employees, and income significantly affect the performance of small enterprises. Similarly, Chandrayanti et al. (2019) stated that overall business characteristics significantly influence business performance. According to Woldie et al. (2008), business size and business age are crucial factors that affect business growth and performance.

Thus, strong and well-defined business characteristics serve as important assets for supporting optimal business performance. This reinforces the notion that businesses with solid structures, proper legal status, and sufficient operational experience are more capable of competing and sustaining their position amid dynamic business environments.

G. The Influence of Entrepreneurial Characteristics on Business Performance

Entrepreneurial characteristics have a positive and significant effect on business performance, with an estimate of 0.331 and a probability value of 0.000. This indicates that personal traits and entrepreneurial attitudes—such as innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy—greatly influence the success and effectiveness of business performance. Entrepreneurs who possess these characteristics tend to be more capable of identifying market opportunities, innovating in products and business processes, and making strategic decisions that contribute to business growth.

According to Warsewicz (2024), the dimensions of entrepreneurial characteristics include innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy, all of which interact with one another and have a positive impact on business performance. Gunawan (2024) emphasizes that creativity and innovation are the main indicators of entrepreneurial characteristics that significantly influence business performance, followed by proactiveness, leadership, and the need for achievement. Utomo et al. (2020) categorize entrepreneurial characteristics into personal, psychological, and competency dimensions, all of which contribute to improving business performance, with psychological factors being the most dominant.

Several other empirical studies (Badiru et al., 2023; Bello, 2023; Igweh Stephen, 2019) also find that characteristics such as creativity, competitive aggressiveness, risk-taking, and entrepreneurial commitment positively enhance innovation and business performance, particularly in the MSME sector. This reaffirms the importance of developing and fostering strong entrepreneurial characteristics to achieve competitive advantage and sustainable business growth.

H. The Influence of Loan Characteristics on Business Performance

Loan characteristics, which consist of key attributes of loan products such as loan size, interest rate, repayment period, loan procedures, and borrowing experience, have varying effects on business performance. Although in this study loan characteristics do not have a significant effect on business performance, with an estimate of 0.005 and a probability value of 0.949, previous research indicates an important relationship between loan characteristics and business performance.

The study by Salia & Mbwambo (2014) shows that loan size has a significant positive correlation with sales revenue and business net worth, while interest rates have a significant negative correlation with business performance measures. A flexible repayment period is also found to have a positive effect on business performance. Borrowing experience may contribute positively to business income, although not necessarily to other performance indicators.

Loan characteristics such as simple procedures, minimal collateral requirements, competitive interest rates, and loan amounts and terms that fit business needs can increase the likelihood of businesses obtaining credit and managing their finances more effectively (Nguyen & Huy, 2023). Conversely, high interest rates and complex procedures can become major obstacles to improving business performance.

Thus, although the results of this study show an insignificant effect, previous literature and studies demonstrate that loan characteristics remain an important factor that can influence business performance. Businesses that receive financing with supportive loan conditions tend to exhibit better performance outcomes.

I. The Influence of Credit Access on Business Performance

Credit access has a positive and significant effect on business performance, with an estimate value of 0.332 and a probability of 0.000. This finding indicates that the easier it is for business owners to obtain credit from financial institutions, the better the business performance achieved. The credit obtained serves as essential capital to support operational and development activities, such as working capital financing, equipment procurement, product innovation, and business capacity expansion. These forms of financial support ultimately enhance productivity, sales, and profitability.

Adequate credit access also enables business owners to manage cash flow more effectively and to execute business operations more efficiently. According to Widyastuti et al. (2023), formal credit access—supported by sufficient financial literacy and loan requirements aligned with business capacity—directly improves MSME performance. This is consistent with Myint (2020), who emphasizes that the development of innovative financing instruments expands MSMEs' access to working capital, resulting in positive impacts on business growth and sustainability.

Aligned with previous empirical findings, the results of this study confirm that credit access is one of the key determinants in improving the performance of micro, small, and medium enterprises. The ease of obtaining financing allows business owners to strengthen their capital structure, enhance operational effectiveness, and accelerate business growth.

J. The Influence of Credit Access on Business Performance

1. **The Influence of Financial Literacy on Business Performance Through Credit Access**

The influence of financial literacy on business performance through credit access indicates that financial literacy not only has a direct impact but also significantly enhances business performance indirectly through improved access to credit. This is reflected in the beta value of 0.084 with a probability of 0.009, demonstrating a positive and significant relationship.

Financial literacy provides essential knowledge for business owners to manage finances effectively, understand loan procedures and requirements, and thus facilitates their ability to access the necessary capital. With easier credit access, business owners can obtain timely and appropriate funding, which increases productivity and business capacity, ultimately contributing to an overall improvement in business performance.

Several studies support these findings. Widyastuti et al. (2023) emphasize that financial literacy and formal credit access directly and significantly influence MSME performance. Priyantoro et al. (2023) also found that financial access mediates the effect of financial literacy on business performance in the tofu processing industry in Kediri City. In addition, Fikri & Nahda (2023) state that financial literacy and financial access have a positive impact on MSME performance, with financial risk attitudes serving as a mediating factor. Ekasari et al. (2024) further explain that financial literacy influences financial performance through financial intermediation.

However, contrasting findings are reported by Nkote & Jakweyo (2024), who found that financial literacy has a significant negative impact on the financial performance of rural micro-enterprises and is only effective when mediated by microcredit access. Setiani et al. (2024) also reported that financial literacy has a small and negative impact on MSME success in Cirebon City, suggesting that other factors may play a more dominant role in that context.

Thus, it can be concluded that financial literacy enhances business performance through the channel of credit access, although the magnitude and direction of this effect may vary depending on socioeconomic context, business characteristics, and institutional support.

2. **The Influence of Business Characteristics on Business Performance Through Credit Access**

The influence of business characteristics on business performance through credit access shows an insignificant result, with a beta value of **0.040** and a probability of **0.225**, indicating that business characteristics do not exert a meaningful impact either directly or indirectly through the mediation of credit access on business performance.

This condition may occur because business characteristics are not the sole or primary factor determining the effectiveness of credit access in improving business performance. Other factors—such as financial management knowledge, business adaptability, and market conditions—also play crucial roles. Credit access itself may be more influenced by the owner's readiness to understand credit procedures and their level of financial literacy, rather than business characteristics alone.

Studies supporting these findings include Chandrayanti et al. (2019), which found that business characteristics such as firm age, legality, type of business, assets, and location positively influence business performance, but not significantly through credit access. Boshnak (2021) also reported that firm size and leverage have complex effects on company performance, which do not always show a significant relationship through financial access. Similarly, Nkote & Jakweyo (2024) found that business characteristics play a less dominant role in improving financial performance compared to financial access and literacy.

On the other hand, contrasting findings were reported by Gunawan (2024) and Putta (2023), who emphasized that psychological and non-psychological entrepreneurial characteristics contribute strongly to business success and performance, especially when combined with strong credit access capabilities.

In conclusion, business characteristics alone are not sufficient to mediate improvements in business performance through credit access. A holistic approach that integrates financial literacy, management capabilities, and external market factors is needed to optimize business performance.

3. **The Influence of Entrepreneurial Characteristics on Business Performance Through Credit Access**

The influence of entrepreneurial characteristics on business performance through credit access shows a positive and significant effect, with a beta value of **0.077** and a probability of **0.035**. This indicates that entrepreneurial characteristics—such as proactiveness, managerial skills, risk-taking attitude, and networking ability—help business owners gain easier access to credit from financial institutions.

This ease of credit access subsequently supports improvements in business performance, as the capital obtained can be used for development, operational management, and business expansion more efficiently. Strong entrepreneurial characteristics make business owners more adaptive and communicative, enabling them to meet credit requirements effectively and utilize the credit optimally.

This study aligns with the findings of Warsewicz (2024) and Civelek et al. (2023), who state that entrepreneurial characteristics—including knowledge, skills, and attitudes—contribute to the successful management of external resources such as credit, thereby positively affecting business performance. Additionally, Dewi et al. (2023) also identified that entrepreneurial characteristics play an important role in strengthening relationships with financial institutions and increasing access to capital.

Conversely, other studies suggest that the influence of entrepreneurial characteristics on credit utilization and business performance is not always significant. Nkote & Jakweyo (2024) reported that business and entrepreneurial characteristics have a limited role compared to financial literacy and market conditions in determining business performance. Moreover, studies such as Gunawan (2024) indicate that external environmental factors and financial institution policies can be more decisive than entrepreneurial traits alone.

In conclusion, entrepreneurial characteristics are an important internal factor that facilitates credit access and enhances business performance; however, success is also influenced by external factors and the ability to integrate resources, consistent with the principles of Resource Dependence Theory.

4. **The Influence of Loan Characteristics on Business Performance Through Credit Access**

The influence of loan characteristics on business performance through credit access shows a positive and significant effect, with a beta value of 0.130 and a probability of 0.003. This indicates that loan characteristics—such as loan amount, loan tenure, interest rates, and the flexibility of credit terms—can affect how easily business owners access credit, which in turn contributes to improved business performance. Loans with characteristics that align with the needs of the business enable entrepreneurs to manage capital efficiently, increase production capacity, and expand business activities.

The findings of this study are consistent with those of Muhammad et al. (2020), who showed that loan characteristics such as loan size and loan duration have a significant effect on the performance of small and medium enterprises. Their study emphasized that loans with appropriate sizes and tenures enhance the ability of businesses to manage capital and improve overall business performance. Additionally, the study by Achieng & Jagongo (2019) found that loan size and loan duration are important factors influencing loan performance, although interest rates do not always have a significant impact—supporting the importance of flexibility in loan characteristics.

This study further reinforces the view that appropriate loan characteristics can facilitate credit access and indirectly enhance business performance, in line with financial intermediation theory, which underscores the importance of aligning loan products with borrower needs (Muhammad et al., 2020; Achieng & Jagongo, 2019).

4. Conclusion

Based on the research conducted on Micro and Small Industry (IMK) entrepreneurs in the textile and apparel subsector in West Java Province regarding the influence of financial literacy, business characteristics, entrepreneurial characteristics, and loan characteristics on business performance mediated by credit access, the following conclusions can be drawn:

1. Financial literacy affects credit access. This means that the higher the financial literacy, the easier it is for entrepreneurs to obtain credit access.
2. Business characteristics do not affect credit access.
3. Entrepreneurial characteristics affect credit access. This indicates that the stronger the entrepreneurial characteristics, the easier it is to gain credit access.
4. Loan characteristics affect credit access. This means that better loan characteristics lead to easier credit access.
5. Financial literacy does not affect business performance.
6. Business characteristics affect business performance. This implies that stronger business characteristics lead to improved business performance.
7. Entrepreneurial characteristics affect business performance. This means that better entrepreneurial characteristics contribute to higher business performance.
8. Loan characteristics do not affect business performance.
9. Credit access affects business performance. This indicates that the easier the credit access, the better the business performance.
10. (a) Credit access mediates the effect of financial literacy on business performance. This means that better credit access strengthens the relationship between financial literacy and business performance.

(b) Credit access does not mediate the effect of business characteristics on business performance.

(c) Credit access mediates the effect of entrepreneurial characteristics on business performance. This indicates that better credit access enhances the relationship between entrepreneurial characteristics and business performance.

(d) Credit access mediates the effect of loan characteristics on business performance. This suggests that better credit access strengthens the relationship between loan characteristics and business performance.

REFERENCES

1. Achieng, K. M., & Jagongo, D. A. (2019). Loan Características and Loan Performance at Higher Education Loans Board in Kenya. International Journal of Business and Social Science. 10(12). 54-63. doi:10.30845/ijbss.v10n12p1.
2. Addo, S. D., & Asante, J. (2023). The Impact of Financial Literacy on Access to Finance: Does Risk Attitude Matter? International Journal of Business, Management, and Economics, https://doi.org/10.47747/ijbme.v4i1.1101
3. Agarwal, S., & Singh, A. (2022). Firm Characteristics and Firm Performance: Evidence from India. Journal of Commerce and Accounting Research. 11(1). 96-104.
4. Agarwal, S., Kigabo, T., Minoiu, C., Presbitero, A. F., & Silva, A. F. (2023). Serving the Underserved: Microcredit as a Pathway to Commercial Banks. Review of Economics and Statistics, 105(4), 780–797.
5. Agyapong, D., & Attram, A. B. (2019). Effect of Owner-Manager's Financial Literacy on The Performance of SMEs in The Cape Coast Metropolis in Ghana. Journal of Global Entrepreneurship Research. DOI: https://doi.org/10.1186/s40497-019 0191-1
6. Aidoo, S., Nombare, E., & Boateng, G. K. (2023). Does Loan Size Matter in How Collateral Characteristics Relate to Credit Access?. Journal of Economics, Finance, and Accounting Studies. DOI: 10.32996/jefas.2023.5.4.2
7. Akdom & Ridwan. (2007). Rumus dan Data Dalam Analisis Statistik. Bandung: Alfabeta.
8. Alharbi, R. K., Yahya, S. F., Ahmed, E. R. (2018). Characteristics of Manager's and SMEs Performance: The Role of Access to Finance as a Moderator. International Journal of Engineering & Technology. 7(4). 5115-5119. DOI: 10.14419/ijet.v7i4.25620
9. Almashhadani, M., & Almashhadani, H. A. (2022). The Beneficial of Firm Size, Board Size, Ownership Structure, and Independence in Developing Markets' Firm Performance: Evidence from Asia. International Journal of Business and Management Invention (IJBMI). 11(7). DOI: 10.35629/8028-110701889
10. Anshika., Singla, A., Malik, G. (2021). Determinants of Financial literacy: Empirical Evidence from Micro and Small Enterprises in India. Asia Pasific Management Review. 26. 248-255. DOI: https://doi.org/10.1016/j.apmrv.2021.03.001
11. Ascarya & Rahmawati, S. (2015). Analysis The Determinants of Micro Enterprises Graduation. Working Paper Bank Indonesia.
12. Asosiasi Fintech Pendanaan Indonesia. (2023). AFPI Digital Summit 2023. Convention Hall Smesco. Jakarta.
13. Azizah, L., & Munir, M. (2022). Analysis of the Effect of Company Performance on Company Value with Profitability as an Intervening Variable. European Journal of Business and Management http://dx.doi.org/10.24018/ejbmr.2022.7.3.1413
14. Badan Pengawasan Keuangan dan Pembangunan. (2024). Sengkartu Industri Tekstil, Tenaga Kerja, dan Tantangan Kebijakan di Jawa Barat. Analisis Isu Pengawasan. 1(2).
15. Badan Pusat Statistik Kabupaten Bogor. (2025). Survei Industri Mikro Kecil Tahunan.
16. Badan Pusat Statistik Provinsi Jawa Barat. (2024). Perkembangan ekspor dan Impor di Jawa Barat, Desember 2023. Berita Resmi Statistik.
17. Badan Pusat Statistik. (2021). Perkembangan Indeks Produksi Triwulanan Industri Mikro dan Kecil 2021.
18. Badan Pusat Statistik. (2022). Perkembangan Indeks Produksi Triwulanan Industri Mikro dan Kecil 2022.
19. Badan Pusat Statistik. (2022). Profil Industri Mikro dan Kecil 2020. BPS Indonesia.
20. Badan Pusat Statistik. (2023). Perkembangan Indeks Produksi Triwulanan Industri Mikro dan Kecil 2023.
21. Badan Pusat Statistik. (2023). Profil Industri Mikro dan Kecil 2021. BPS Indonesia. Badan Pusat Statistik. (2023). Profil Industri Mikro dan Kecil 2022. BPS Indonesia.
22. Badan Pusat Statistik. (2023). Statistik Indonesia 2023.
23. Badan Pusat Statistik. (2024). Profil Industri Mikro dan Kecil 2023. BPS Indonesia.
24. Badan Pusat Statistik. (2024). Provinsi Jawa Barat Dalam Angka 2024. BPS Provinsi Jawa Barat.
25. Badan Pusat Statistik. (2024). Statistik Daerah Provinsi Jawa Barat 2024. BPS Provinsi Jawa Barat.
26. Badi, L. & Ishengoma, E. (2021). Access to Debt Finance and Performance of Small and Medium Enterprises. Journal of Financial Risk Management. 10. 241-259. DOI: https://doi.org/10.4236/jfrm.2021.103014
27. Badiru, N. I., Oyedepo, O. H., Adebayo, J. O. (2023). Entrepreneurial Characteristics and Organisational Performance of Medium Enterprises. Izvestiya. Journal of Economics, Management and Informatics, 67 (1), p. 5 – 23.
28. Bank Indonesia. (2020). Bersinergi Membangun Ekonomi dan Keuangan Syariah. Laporan Ekonomi & Keuangan Syariah.
29. Bank Indonesia. (2024). Optimalisasi Sumber Pertumbuhan Ekonomi Baru untuk Ketahanan dan Pertumbuhan Ekonomi yang Berkelanjutan. Laporan Perekonomian Provinsi Jawa Barat.
30. Barine, L. O. (2021). Entrepreneurial Characteristics and Performance of Small and Medium Scale Enterprises in Port Harcourt Metropolis. World Journal of Entrepreneurial Development Studies. 6(1).
31. Barinua, V., & Chiedozie, M. (2022). Entrepreneurial Characteristics and Business Performance in Small and Medium Enterprises in Enugu state. International Journal of Business & Entrepreneurship Research. 13(3). 130–142.
32. Bello, A. O. (2024). Influence of Entrepreneurial Characteristics (Risk Taking and Level of Innovation of SMEs) on Business Performance of SMEs in Ibadan Metropolis. Proceeding International Conference on the Sociology of the Global Economy, Education, Arts, https://doi.org/10.31058/j.ps.2024.20019a
33. Berliansyah, R., & Khoirunnurofik, K. (2023). Micro Small Industries Performance Improvement: Analysis of the KUR Program. Economics Development Analysis Journal, 12(3), 381-395. DOI: https://doi.org/10.15294/edaj.v12i3.65457

34. Boshnak, H. A., Basheikh, A. M., Basaif, M. S. (2021). The Impact of Firm Characteristics on Firm Performance during The COVID-19 PANDEMIC: Evidence from Saudi Arabia. Asian Economic and Financial Review. 11(9). DOI: 10.18488/journal.aefr.2021.119.693.709
35. Chandrayanti, T., Nidar, S. R., Mulyana, A., & Anwar, M. (2020). Impact of Entrepreneurial Characteristics on Credit Accessibility: Case Study of Small Businesses in West Sumatera-Indonesia. Entrepreneuship and Sustainability Issues. 7(3).
36. Chin, W., W. (1998). The Partial Least Squares Approach for Structural Equation Modeling. In George A. Marcoulides (Ed.), Modern Methods for Business Research, Lawrence Erlbaum Associates.
37. Civelek, M., Folvarčná, A., Brezina, I., Veselá, Z., Mikoláš, Z. (2023) : Entrepreneurial Attitudes in Firms' Credit Access, Contemporary Economics, University of Economics and Human Sciences in Warsaw, Warsaw, 17(4), pp. 361-378, https://doi.org/10.5709/ce.1897-9254.516
38. Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
39. Czech, K., Ochnio, L., Wielechowski, M., Zabolotnyy, S. (2024). Financial Literacy: Identification of the Challenges, Needs, and Difficulties among Adults Living in Rural Areas. Agriculture, https://doi.org/10.3390/agriculture14101705
40. Dewi, N. G., Ridhasyah, R., & Wibawa, T. A. (2023). Financial Access and MSMEs Performance during Pandemic COVID-19: The Moderating Role of Digitization. JDE (Journal of Developing Economies). 8(1). 144-152. DOI: https://doi.org/10.20473/jde
41. Diandra, D., & Azmy, A. (2020). Understanding Definition of Entrepreneurship. International Journal of Management, Accounting and Economics. 7(5). 301 306.
42. Drees, J. M., & Heugens, P.P.M.A.R. (2013). Synthesizing and Extending Resource Dependence Theory: A Meta-Analysis. Journal of Management. 39(16). https://doi.org/10.1177/0149206312471391
43. Ekasari, A., Meutia., Uzliawati, L., Mulyasari, W. (2024). The Effect of Financial Literacy on Indonesian Women Micro Entrepreneurs Through Financial Intermediation. Journal of Infrastructure, Policy and Development., 8(8), 5686. DOI: https://doi.org/10.24294/jipd.v8i8.5686
44. Essel, B. K. C., Adams, F., Amankwah, K. (2019). Effect of Entrepreneur, Firm, and Institutional Characteristics on Small-Scale Firm Performance in Ghana. Journal of Global Entrepreneurship Research. 9(55). DOI: https://doi.org/10.1186/s40497-019-0178-y
45. Fadilla, A. M., Fitriani, N., & Armanda, L. A. (2025). Analisis Rasio Likuiditas, Solvabilitas, Dan Profitabilitas Yang Tercermin Dalam Laporan Keuangan UMKM Toko Arsy Hijab. Jurnal Ilmiah Multidisiplin. 4(7).
46. Fikri, A. S. K., & Nahda, K. (2023). The Effect of Financial Literacy on MSME Performance Through Financial Access and Financial Risk Attitude as a Mediation Variable. Journa Economic Resources. 6(2).
47. Fiorini, P. D. C., Seles, B. M. R. P., Jabbour, C. J. C., Mariano, E. B., Jabbour, A. B. L. d. S. (2018). Management Theory and Big Data Literature: From a Review to a Research Agenda. International Journal of Information Management. 43. 112-129.
48. Firnalista, N., Nofialdi., Azriani, Z. (2020). Impact of Entrepreneurial Characteristics and Access to Credit on Business Performance of Small Business (Case: Brown Sugar Processing in Agam District). Indonesian Journal of Agricultural Research. 3(1). 56-64.
49. Fitria, I., Soejono, F., Tyra, M. J. (2021). Literasi keuangan, Sikap Keuangan dan Perilaku Keuangan dan Kinerja UMKM. Journal of Business and Banking. 11(1). 1-15.
50. Flaminiano, J. P., & Francisco, J. P. (2021). Firm Characteristics and Credit Constraints Among SMEs in the Philippines. Small Business International Review, 5(1), e332. DOI: https://doi.org/10.26784/sbir.v5i1.332
51. Foldi, P., Dolgos, A.P., & Bareith, T. (2023). Examination of The Performance of Food Industry Enterprises Between 2010 and 2021. Regional and Business Studies. 15(2). 59-71.
52. Gadzo, S. G., Kportorgbi, H. K., & Gatsi, J. G. (2019). Credit Risk and Operational Risk on Financial Performance of Universal Banks in Ghana: Apartial Least Squared Structural Equation Model (PLS SEM) Approach. Cogent Economics & Finance. 7(1). 1589406.
53. Garba, A. (2020). Effect of Entrepreneur and Firm Characteristics on Business Success of Smal and Medium Scale Enterprises in North Central, Nigeria. The International Journal of Business Management and Technology. 4(6).
54. Ghozali, I. (2006). Structural Equation Modeling: Teori dan Aplikasi dengan Program AMOS 5.0. Semarang: Badan Penerbit Universitas Diponegoro.
55. Gunawan, A. F. (2024). The Impact of Entrepreneurial Characteristics and Competencies on Business Performance in The Creative Industry in Indonesia. Asia Pasific Journal of Innovation and Entrepreneurship. 18(3). 300-317. DOI: http://dx.doi.org/10.1108/APJIE-09-2023-0172
56. Gunawan, A., Jufrizen., & Pulungan, D. R. (2022). Improving MSME Performance Through Financial Literacy, Financial Technology and Financial Inclusion. International Journal of Applied Economics, Finance and Accounting. 15(1). 39 52. Doi: 10.33094/ijaefa.v15i1.761
57. Handoyo, S., Mulyani, S., Ghani, E. K., Soedarsono, S. (2023). Firm Characteristics, Business Environtment, Strategic Orientation, and Performance. Administrative Science. 13(74). DOI: https://doi.org/ 10.3390/admsci13030074
58. Haryono, S. (2016). Metode SEM Untuk Penelitian Manajemen dengan AMOS LISREL PLS. PT. Intermedia Personalia Utama: Jakarta.
59. Heliyon. DOI: Suratman, M. (2024). Menggagas Bangun Sumber Daya Manusia Koperasi dan Usaha Mikro Kecil. Bahan Orasi Ilmiah Pengukuhan Guru Besar. Universitas Widyatama. Bandung.

60. Hererra, J. J D., Warokka, A. & Aqmar, A. Z. (2023). Financial
61. Herwiyanti, E., & Rafinda, A. (2020). Determinant Factor of Small Medium Enterprises to Access Bank Credit. Jurnal Ilmiah Akuntansi. 6(1). 37-45.
62. Hessels, J., & Naudé, W., (2019). The Intersection of the Fields of Entrepreneurship and Development Economics: A Review towards a New View. Journal of Economic Surveys. 33(2). 389-403.
63. Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource Dependence Theory: A review Journal 10.1177/0149206309343469
64. Igweh, F., & Stephen, A. (2019). Effect of Entrepreneurial Roles on Performance of SMEs: The Nigeria Human Resource Perspective. International Journal of Business, Economics & Management, 3(1), 22-29. DOI: https://doi.org/10.31295/ijbem.v3n1.106
65. Ilmi, N., Muttalib, A., Syahriani, A. T. (2024). The Effect of Financial Literacy and Financial Management on SME Business Performance in Gowa Regency. International Journal of Economic Research and financial Accounting (IJERFA). 2(3). 468-476.
66. Indarto, & Santoso, D. (2020). Karakteristik Usaha, Karakteristik Wirausaha, dan Lingkungan Usaha Penentu Kesuksesan Usaha Mikro Kecil dan Menengah. Jurnal Riset Ekonomi dan doi:http://journals.usm.ac.id/index.php/jreb B
67. Ioannidou, V., Pavanini, N., & Peng, Y. (2022). Collateral and Asymmetric Information in Lending Markets. Journal of Financial Economics. 144(1). 93 121.
68. Isaac, S., & Michael, W. B. (1981). Handbook in Research and Evaluation. California: Edits Publisher.
69. Iskandar, Y., Zulbainarni, N., & Jahroh, S. (2020). Pengaruh Karakteristik Usaha dan Wirausaha Terhadap Kinerja UMKM Industri Pengolahan Perikanan di Kabupaten Sukabumi. Jurnal Riset Ekonomi Manajemen. 4(1). DOI: http://dx.doi.org/10.31002/rn.v4i1.2205
70. Islam, M. A., Khan, M. A., Obaidullah, A. Z. M., & Alam, M. S. (2011). Effect Of Entrepreneur and Firms Characteristic On the Business Success of Small Medium Enterprise (SMEs) in Bangladesh. International Journal of Business and Management. 6(3): March. 289-299.
71. Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm : Managerial Behavior , Agency Costs and Ownership Structure. Journal of Financial Economics. 3. 305–360. DOI: https://doi.org/doi:10.1016/0304-405X(76)90026-X
72. Kamar Dagang Indonesia. (2023). Data dan Statistik UMKM Indonesia. Kamar Dagang Indonesia. https://kadin.id/data-dan-statistik/umkm-indonesia/
73. Kanwil Ditjen Perbendaharaan Provinsi Jawa Barat. (2024). Kajian Fiskal Regional (KFR) Triwulan I Tahun 2024. Melalui https://djpb.kemenkeu.go.id/kanwil/jabar/id/data-publikasi/kajian-fiskal regional/3150-kajian-fiskal-regional-kfr-triwulan-i-tahun-2024-kanwil-djpb provinsi-jawa-barat.html
74. Kartiningsih, D., & Daryanto, W. M. (2020). The Effect of Firm Characteristics to Profitability of Food and Beverages Companies Listed in Indonesia Stock Exchange. International Journal of Business,, Economics, and Law. 22(1).
75. Kasmir. (2019). Manajemen Keuangan. Rajawali Pers.
76. Kementerian Koperasi dan Usaha Kecil dan Menengah. (2024). Tenaga Pendukung Pengembangan Kewirausahaan Melalui Sinergi dengan Dunia Usaha dan Industri. Jakarta.
77. Kementerian Perdagangan Republik Indonesia. (2023). Laporan Kinerja Perdagangan Luar Negeri Tahun 2023. Jakarta: Kementerian Perdagangan RI.
78. Kementerian Perindustrian. (2022). Satu Abad Industri Tekstil Indonesia, dari Zaman Kolonial Hingga Berjaya Era Digital.
79. Khan, M. Y., & Jain, P. K. (2018). Financial Management: Text, Problems and Cases. Mcgraw - Hill Education
80. Khan, R. U., Salamzadeh, Y., Kawamorita, H., Rethi, G. (2020). Entrepreneurial Orientation and Small and Medium Enterprises Performance; Does Access to Finance Moderate the Relation in Emerging Economies. Sage Journals. 25(1). DOI: https://doi.org/10.1177/0972262920954604
81. Knight, F. H. (1921). Risk, Uncertainty and Profit. Houghton Mifflin Company: Boston and New York.
82. Kusa, R., Duda, J., & Suder, M. (2021). Explaining SME Performance with FsQCA: The Role of Entrepreneurial Orientation, Entrepreneur Motivation, and Opportunity Perception. Journal of Innovation and Knowledge. 6. 234-245. DOI: https://doi.org/10.1016/j.jik.2021.06.001
83. Lambert, R. A., Leuz, C., & Verrechia, R. E. (2011). Information Assymetry, Information Precision, and The Cost of Capital. Review of Finance, Forthcoming.
84. Lubis, M. C., Sugianto, Nawawi, Z. M. (2025). Mitigasi Risiko Pembiayaan KUR Syariah untuk UMKM: Studi Kasus di BSI KC Medan Ahmad Yani. Jurnal Perekonomian dan Kebijakan Publik (JPEK), 9(2).
85. Lumpkin, G. T., & Dess, G. G. (2001). Linking Two Dimensions of Entrepreneurial Orientation to Firm Performance: The Moderating Role of Environment and Industry Life Cycle. Journal of Business Venturing. 16. 429-451.
86. Lusardi, A., & Mitchell, O. S. (2023). The Importance of Financial Literacy: Opening a New Field. Journal of Economic Perspectives. 37(4). 137–154.
87. Lusimbo, E. N., & Muturi, W. (2016). Financial Literacy and The Growth of Small Enterprises in Kenya: A Case of Kakamega Central Sub-Country, Kenya. International Journal of Economics, Commerce and Management. 4(6). 828 845. DOI: https://ijecm.co.uk/wp-content/uploads/2016/06/4649.pdf
88. Martínez, C. R., García, E.M., and Mejía, S. H. (2024). Financial Literacy of Entrepreneurs and Companies' Performance. Journal of Risk and Financial Management. 17(63). DOI: https://doi.org/10.3390/ jrfm17020063.

89. Martini., Setiawan, D., Adhariani, D., Harymawan, I., Widodo, M. (2023). E-commerce and Micro and Small Industries Performance: The Role of Firm Size as a Moderator. Journal of Open Innovation: Technology, Market, and Complexity. DOI: https://doi.org/10.1016/j.joitmc.2023.100142
90. Matuku, C., M`ithiria, E. N., Ntale, J. F. (2019). Determinants of Credit Accessibility of Small and Medium Enterprises in Nairobi County, Nairobi Central Ward. International Journal of Research in Management, Economics and Commerce. 9(9). 76-85.
91. Meitriana, M. A., Yuliarmi, N. N., Utama, M. S., Marhaeni, A. A. I. N. (2022). Social Capital-Based Financial Literacy to Improve Business Performance: a Narrative Review. International Journal on Social Science, Economics and Art. 12 (2). 83 90.
92. Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. The American Economic Review, 48(3), 261–297. http://www.jstor.org/stable/1809766
93. Msomi, T. S. (2023). The Effect of Interest Rates on Credit Access for Small and Medium-Sized Enterprises: A South African Perspective. Bank and Bank Systems. 18(4). DOI: http://dx.doi.org/10.21511/bbs.18(4).2023.13
94. Muhammad, I. B., Bambale, A. J., Ibrahim, M. A. (2019). Loan Characteristics, Loan Repayment and Performance of Small and Medium Enterprises in Kano Metropolitan: A Mediating Model. Journal of Finance, Accounting and Management, 10(1), 43-56.
95. Musthafa, I., Handra, H., Bachtiar, N., Taifur, W. D., & Ariyanto, E. (2023). Financial Literacy and Performance of Micro, Small, and Medium Enterprises: A Literature Review. Journal of Management, Accounting, General Finance and International Economic Issues (Marginal). 3(1).
96. Mwakajila, H. M., & Nyello, R. M. (2021). Leadership Styles, Firm Characteristics and Business Financial Performance of Small and Medium Enterprises (SMEs) in Tanzania. Open Journal of Business and Management. 9. 1696-1713. DOI: https://doi.org/10.4236/ojbm.2021.94093
97. Myers, S. C., & Majluf, N. S. (1984). Corporate Financing and Investment Decisions When Firms Have Information That Ivestors Do Not Have. Journal of Financial Economics. 13(2), 187-221. DOI: https://doi.org/10.1016/0304-405X(84)90023 0
98. Myers, S.C. (1984). Capital Structure Puzzle. Journal of Finance. 39(1). 575-592.
99. Myint, O. M. (2020). The Effect of Financial Access on Performance of SMEs in Myanmar. International Journal of Scientific and Research Publications. 10(6). DOI: http://dx.doi.org/10.29322/IJSRP.10.06.2020.p10230
100. Nakiyingi, J. (2010). Managerial Competencies, Access to Credit and Business Sector. Makarere University.
101. Naufal, M. I., & Purwanto, E. (2022). The Impact of Financial Literacy on the Sustainability Performance of MSMEs (Case Study of the F & B Industry in Sumbersari Jember District). Financial Literacy, Business Performance, Business Sustainability, 16(2), 209- 215.
102. Nayla, A. F. (2014). Komplet Akuntansi untuk UKM dan Waralaba. Jakarta Selatan: Laksana.
103. Nguyen, T. N., & Huy, C. T. (2023). Factors Affecting Credit Access of Individual Business Households in Ho Chi Minh City, Vietnam. International Journal of Professional Business Review. 8(4). https://doi.org/10.26668/businessreview/2023.v8i4.1910
104. Nieto, B. G., & Cinca, C. S. (2019). 20 Years of Research in Microfinance: An Information Management Approach. International Journal of Information Management. 47. 183-197. DOI: https://doi.org/10.1016/j.ijinfomgt.2019.01.001
105. Nkote, I., & Jakweyo, C. (2024). Do Government Support Correlates Enhance Financial Performance? Rural Microenterprises Perspectives. Journal of Money and Business. 4(1). 91-106. DOI: https://doi.org/10.1108/JMB-09-2022-0044
106. Nkundabanyanga, S. K., Kasozi, D., Nalukenge, I., Tauringana, V. (2014). Lending Terms, Financial Literacy, and Formal Accessibility. Internartional Journal of Social Economics. 41(5). 342-361.
107. Nurafifah, A., Soleha, A., & Misra, I. (2025). Peran Manajemen Keuangan Dalam Pengelolaan UMKM untuk meningkatkan Keberlanjutan Bisnis. Opportunity Research and Community Service Journal. 3(1). 18-41. DOI: https://10.55352/opportunity
108. Nyabaga, R. M., & Wepukhulu, J. M. (2020). Effect of Firm Characteristics on Financial Performance of Listed Commercial Banks in Kenya. International Journal of Economics and Financial Issues. 10(3). 255-262. DOI: https://doi.org/10.32479/ijefi.9692
109. Oke, L. A., Sanni, M., & Ijaiya, M. A. (2020). Firm Characteristics and Access to Bank Financing: Evidence from SMEs in North Central Nigeria. Amity Journal of Finance. 4(2). 1-25.
110. Oluremi, I. M., Olumide, O.O., James, O.O., Josephine, I. T. (2023). Influence of Entrepreneurial Characteristics on Business Performance of SMES in Osun State. International Journal of Innovative Science and Research Technology. 8(4).
111. Otoritas Jasa Keuangan. (2022). Acara Peluncuran Modul Literasi Keuangan. Jakarta.
112. Otoritas Jasa Keuangan. (2023). Peningkatan Literasi dan Inklusi Keuangan di Sektor Jasa Keuangan Bagi Konsumen dan Masyarakat. Salinan Peraturan Otoritas Jasa Keuangan Republik Indonesia Nomor 3. Otoritas Jasa Keuangan. (2024). Roadmap Penguatan Bank Pembangunan Daerah 2024-2027. Jakarta.
113. Ottih, L. O. (2016). Entrepreneurship; Personality, Process and Enterprise. Port Harcourt: Pearl Publishers International Ltd.
114. Ottoman, O. (2018). The Role of Business Performance on MSMEs Credit Access: Evidence from Finca at Tanga City. The Open University of Tanzania Institutional Repository.

115. Pattnaik, D., Ray, S., Hassan, M. K. (2024). Microfinance: A Bibliometric Explorationof The Knowledge Landscape. Heliyon. 2405-8440. DOI: https://doi.org/10.1016/j.heliyon.2024.e31216
116. Penrose, E. T. (1959). The Theory of the Growth of the Firm. New York: John Wiley.
117. Pfeffer, J., & Salancik, G. R. (1978). The External Control of Organizations: A Resource Dependence Perspective. Ny: Harper and Row.
118. Phillipson, J., Tiwasing, P., Gorton, M., Maioli, S., Newbery, R. and Turner, R. (2019). Shining a Spotlight on Small Rural Businesses: How Does Their Performance Compare with Urban?. Journal of Rural Studies. 68, pp. 230-239.
119. Priyantoro, P., Ratnawati, K., Aisjah, S. (2023). The Effect of Financial Literacy on Business Performance Through Mediation of Financial Access and Financial Risk Attitude. International Journal of Research in Business and Social Science. 12(9). 275-287. DOI: https://doi.org/10.20525/ijrbs.v12i9.3024
120. Pudhaningrum, E. S., & Athoillah, M. (2025). Determinan Penyerapan Tenaga Kerja Sektor Industri: Analisa Data Panel di Provinsi Jawa Barat. Jurnal Dinamika Ekonomi Pembangunan. 8(1), https://ejournal.undip.ac.id/index.php/dinamika_pembangunan 1-18.
121. Putra, G. P., & Ramadhayanti, A. (2024). Pengaruh Struktur Modal dan Likuiditas Terhadap Profitabilitas UMKM (Studi Kasus pada UMKM di Kelurahan Menteng Dalam). Jurnal Cakrawala Akademika (JCA). 1(3), 653-670. https://doi.org/10.70182/JCA.v1i3.44
122. Putta, S. S. (2023). The Influence of Entrepreneurial Characteristics on the Financial Performance of Small and Medium Scale Enterprises. International of Creative Research Thought (IJCRT). 11(4).
123. Rahmawati, A., Wahyuningsih, S. H., Garad, A. (2023). The Effect of Financial Literacy, Training and Locus of Control on Creative Economic Business Performance. Social Science & Humanities Open DOI: https://doi.org/10.1016/j.ssaho.2023.100721
124. Ringle, C. M., Wende, S., & Becker, J-M. (2024). SmartPLS 4. Bönningstedt: SmartPLS. Retrieved from https://www.smartpls.com
125. Rofiqoh, I., Zulhawati., Buchdadi, A. D., Gurendrawati, E. (2023). UMKM Naik Kelas (Pemberdayaan Ekonomi Skala Mikro). Yogyakarta: Pustaka Pelajar.
126. Romeo, Giovanni. (2020). Data Analysis for Business and Economic. Element of Numerical Mathematical Economics with Excel-Static and Dynamic Optimization. Pages 695-761.
127. Ropke, J. (2004). On Creating Entrepreneurial Energy in The Ekonomi Rakyat The Case of Indonesian Cooperatives. Jurnal Ekonomi Kewirausahaan. 3(2). 43-61. Sabana, B. M. (2014). Entrepreneur Financial literacy, Financial Access, Transaction Costs and Performance of Micro Enterprises in Nairobi City County, Kenya (PhD Thesis), University of Nairobi, Kenya.
128. Salia, P. J., & Mbwambo, J. S. (2014). Credit Characteristics and Business Performance: A Survey of Women owned Microenterprises in Tanzania. Asian Business Review, 4(1).
129. Sari, I. A., & Rahmantika, D. N. (2021). The Effect of Firm Chaarcteristics and Entrepreneur Characteristics on The Success of MSME Business in Central Java. Jurnal Manajemen Daya Saing. 23(1).
130. Sarkis, J., Zhu, Q., Lai, K. (2011). An organizational theoretic review of green supply chain management literature. International Journal of Production Economics. 130(1). 1-15. DOI: https://doi.org/10.1016/j.ijpe.2010.11.010
131. Savitri, C., Faddila, S. P., Iswari, H. R., Anam, C., Syah, S., Mulyani, S. R., & Sihombig, P. (2021). Statistik Multivariat Dalam Riset. In D. (c) I. Ahmaddien (Ed.), Widina (Issue 15018).
132. Setiani, D., Pratiwi, Y. I., Komara, A. (2024). Financial Behavior Mediates Financial Literacy And Inclusion On The Performance Of Cirebon City MSMES. International Journal Of Humanities Education And Social Sciences (IJHESS). 4(1). 124 – 139.
133. Setyawati, A., Sudarmiatin, S., Wardhana, L. W. (2023). Empowering MSMEs: The Impact Of Financial Literacy And Inclusion (Systematic Literature Review). International Journal of Economic and Management Research. 2(3). 121-138. DOI: https://doi.org/10.55606/ijemr.v2i3.132
134. Shofi, F., Aisjah, S., Suryadi, N. (2022). The Impacts of Social Capital and Financial Literacy on Business Performance with Financial Access SMEs Batik Pamekasan Regency as Mediation. International Journal of Research in Business and Social Science. 11(8). DOI: https://doi.org/10.20525/ijrbs.v11i8.2146
135. Srimulyani, V. A., Hermanto, Y. B., Rustiyaningsih, S., Waloyo, L. A. S. (2023). Internal Factors of Entrepreneurial and Business Performance of Small and Medium Enterprises (SMEs) in East Java, Indonesia. Heliyon. DOI: https://doi.org/10.1016/j.heliyon.2023.e21637
136. Stiglitz, J. E., & Weiss, A. (1981). Credit Rationing in Markets with Imperfect Information. The American Economic Review. 71(3). 393-410.
137. Sudewi, N. N. D., Dewi, S. K. S. (2022). The Effect of Financial Literacy and Intellectual Capital on Financial Performance. International Journal of Business Management and Economic Review http://doi.org/10.35409/IJBMER.2022.3425
138. Sugiyono. (2020). Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: Alfabeta. Sugiyono. (2020). Metode Penelitian Kuantitaif, Kualitatif, dan Kombinasi (Mixed Methods). Bandung: Alfabeta.
139. Suminah, S., Suwarto, S., Sugihardjo, S., Anantanyu, S., Padmaningrum, D. (2022). the Determinants of Micro, Small, and Medium-Scale Enterprise Performers' Income During Covid-19 Pandemic Era DOI : https://doi.org/10.1016/j.heliyon.2022.e09875

140. Surjanti, R. L. P. N. S., Mulyantimo, E., & Triyani, D. (2024). Analysis of Determinants of MSME Performance. International Journal of Economics Development Research. 5(1). 825-839.
141. Sutrisno. (2017). Manajemen Keuangan Teori dan Aplikasi. Ekonisia.
142. Suwaji, & Agustedi. (2023). The Influence of Financial Literacy and Financial Inclusion on Investment Decisions and Business Performance. International Conference of Business and Social Sciences.
143. Tambunan, T. T. H. (2018). UMKM Indonesia: Isu dan Masalah. Ghalia Indonesia.
144. Taslim, L., Rifin, A., & Jahroh, S. (2020). Pengaruh Pembiayaan Terhadap Kinerja Usaha Mikro dan Kecil Olahan Ubi Kayu di Indonesia [The Effect of Financing on the Performance of Cassava Processed Micro and Small Enterprises in Indonesia]. Jurnal Agribisnis Indonesia (Journal of Indonesian Agribusiness). 8(1). 33-42.
145. Thuy, V. T. T. T., Nhung, P. T. H. N., Oanh, L. T. T. O., Hoa, N. T. K. H. (2023). Factors Affecting Business Performance: Expanding Theoretical Measurements. International Journal of Professional Business Review. 8(5). 01-18. DOI: https://doi.org/10.26668/businessreview/2023.v8i5.2134
146. Tran, A. H. (2021). The Impact of Bank Credit Accessibility of Small and Medium Enterprises in Ho Chi Minh City, Vietnam. International Journal of Multidisciplinary Research and Development. 8(1). 25-30.
147. Tuffour, J. K., Amoako, A. A., & Amartey, E. O. (2022). Assessing the Effect of Financial Literacy Among Managers on the Performance of Small-Scale Enterprises. Global Business Review, International Management Institute. 23(5). 1200-1217. DOI: https://doi.org/10.1177/0972150919899753
148. Tumba, N. J., Onodugo, V. A., Akpan, E. E., Babarinde, G. F. (2022). Financial Literacy and Business Performance Among Female Micro-Enterprises. Investment Management and Financial Innovations, 19(1). 156-167. DOI: 10.21511/imfi.19(1).2022.12.
149. Tupamahu, F. A. S., Balik, S., Tamaela, E. Y. (2021). Karakteristik Wirausaha, Tingkat Pendidikan, dan Karakteristik Usaha Sebagai Penentu Keberhasilan Bisnis Pariwisata di Wilayah Pesisir dan Pulau-Pulau Kecil. Jurnal Maneksi. 10(1).
150. Twumasi, M.A., Jiang, Y., Wang, P., Ding, Z., Frempong, L.N., Acheampong, M. O. (2022). Does Financial Literacy Inevitability Lead to Access to Finance Services? Evidence from Rural Ghana. Ciência Rural. 52(3). Doi: https://doi.org/10.1590/0103-8478cr20210112
151. Ulrich, D. and Barney, J.B. (1984) Perspectives in Organizations: Resource Dependence, Efficiency, and Population. Academy of Management Review, 9, 471-81.
152. Usama, K. M., & Yusoff, W. F. W. (2019). The Impact of Financial Literacy on Business Performance. International Journal of Research and Innovation in Social Science (IJRISS). 3(10).
153. Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial Literacy and Stock Market Participation. Journal of Financial Economics, 101(2), 449–472. DOI: https://doi.org/10.1016/j.jfineco.2011.03.006
154. Waheed, I., Timothy, O. K., Clement, J. O. (2020). Entrepreneurial Characteristics and Performance of Small and Medium Scale Enterprises (SMEs) In Kwara State. Hummingbird Publications Journal of Management Science Entrrepreneurship. 20(7). 85-101.
155. Warsewicz, H. G. (2024). Relationship Between Entrepreneurial Orientation, Innovative Co-Branding Partnership, and Business Performance. Journal of Entrepreneurship, Management and Innovation. 20(2). 139-159. DOI: https://doi.org/10.7341/20242027
156. Widyastuti, M., Ferdinand, D. Y. Y., Hermanto, Y. B. (2023). Strengthening Formal Credit Access and Performance through Financial Literacy and Credit Terms in Micro, Small and Medium Businesses. Journal of Risk and Financial Management. 16(1). 52. DOI: https://doi.org/10.3390/jrfm16010052
157. Woldie, A., Leighton, P., & Adesua, A. (2008). Factors Influencing Small and Medium Enterprises (SMEs): an Exploratory Study of Owner/Manager and Firm Characteristics. Banks and Bank Systems, 3(3).
158. Yakob, S., Yakob, R., B.A.M, H.S., Rusli, R. Z. A. (2021). Financial Literacy and Financial Performance of Small and Medium-sized Enterprises. The South East Asian Journal of Management. 15(1). DOI: 10.21002/seam.v15i1.13117.
159. Zehir, C., Findikli, M. A., Çeltekligil, K. (2019). Resources Dependence Theory, Firm Performance, and Producers-Suppliers Relationships. The European Proceedings of Social & Behavioural https://dx.doi.org/10.15405/epsbs.2019.01.02.14