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The Impact of Microfinance on the Income of Micro, Small, and Medium Enterprises (MSE) in Indonesia: A Sectoral Analysis

Rendra Wirawan[1]

Department of Management, Institut Teknologi dan Bisnis Widya Gama Lumajang, Indonesia [1]

Corresponding Author: Rendra Wirawan (rendra.w@dosen.itbwigalumajang.ac.id)

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ABSTRACT

This study investigates the impact of various types of microfinance on the income of micro, small, and medium enterprises (MSMEs) in Indonesia. Utilizing data from the 2022 Micro and Small Industry Survey conducted by Statistics Indonesia, the research employs multiple linear regression analysis to assess the effects of cooperative loans, non-bank financial institutions, and People's Business Credit (KUR) on MSME income across different industry sectors. According to the collected data, the survey covers 24 business sectors grouped within the Indonesian Standard Industrial Classification (KBLI), facilitating a comprehensive analysis of various MSME sectors in Indonesia. The results reveal that KUR significantly enhances income across various sectors, demonstrating its effectiveness in improving financial performance. In contrast, the impact of cooperative loans and non-bank financial institutions varies by sector, with cooperative loans showing significant effects only in the tobacco processing industry and non-bank financial institutions impacting primarily the textile sector. These findings highlight the importance of selecting appropriate microfinance options tailored to sector-specific needs. The study underscores that strategic microfinance choices can significantly boost MSME competitiveness and operational efficiency in Indonesia.

Keywords: Medium Enterprises, Microfinance, Micro, and Small.

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in reducing poverty and contributing to economic growth in both developed and developing countries (Manzoor et al., 2021 and Reza Juanda et al., 2023). MSMEs serve as the backbone of many economies by providing employment, fostering innovation, and enhancing competitiveness, thereby promoting sustainable economic development and improving societal welfare globally (Abisuga-Oyekunle et al., 2020). According to (Gherghina, S et al., 2020) the development and competitiveness of MSMEs are prioritized by both developed and developing nations to drive economic activity from the micro to the middle scale. In Indonesia, SMEs have a strategic role in national economic development and growth. According to the Ministry of Cooperatives and SMEs, in 2021, Indonesian SMEs absorbed

96.9% of the workforce and contributed 60.5% to the national GDP. During the economic crisis of 1997-1998, the SME sector was able to stabilize economic activities and absorb a massive number of workers (Yusgiantoro et al., 2019). This resilience was again evident in 2019, when SMEs were one of the sectors that managed to withstand the pressures of the COVID-19 pandemic, employing 9.58 million people (BPS, 2021). Furthermore, research by (Patma et al., 2021 and Kurniawati et al., 2021), indicated that SMEs were among the quickest to adopt digital technology and innovate their business models to cope with the challenges posed by COVID-19. Governments are expected to act as facilitators for capital access through the implementation of various policies, particularly in funding and capitalization aspects, to enhance operational efficiency, market reach, and the overall sustainability of MSMEs (Park et al., 2020 and Firdaus et al., 2020).

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in driving economic progress; however, they often face significant barriers to achieving sustainable growth (Khan, 2022). MSMEs frequently encounter challenges related to disparities in growth rates and operational scale compared to larger entities, primarily due to limited capital for expanding market access (Jalil et al., 2022). Moreover, MSME operators find it difficult to secure formal financing compared to large companies. This difficulty is supported by findings from (Kimaro, 2023 and Nautwima, J & Asa, 2021), which indicate that MSMEs often face loan rejections from formal institutions due to a lack of collateral, inadequate financial records, and the absence of business licenses and other administrative documents. . According to (Maran, 2022 and Awoyemi et al., 2020), SMEs are a vulnerable business sector due to their reliance on limited financial resources and capital. Research by (Moussa, 2020) indicates that SMEs encounter greater difficulties in obtaining formal financing compared to larger companies.To address these issues, several countries such as Tanzania, Ethiopia, and Pakistan have implemented various policies, including the regulation of lower interest rates, interest rate literacy programs, and microfinance support to bolster MSME capital. That situation is happen ini SMEs Indonesia that face various internal challenges, particularly in the aspect of capital financing. The Indonesian Central Statistics Agency (BPS, 2021) reports that 25.64% of SMEs struggle with capital financing issues. Government capital financing policies channeled through banks have not been fully effective due to several factors, such as high interest rates, lack of collateral, and rejected loan applications. Consequently, 50.14% of SMEs resort to non-bank sources for their capital needs. However, many of these businesses fall into the trap of predatory lending practices. To address these issues, the government enacted Law No. 20 of 2008, which expands funding options and facilitates capital financing through both banks and non-bank financial institutions.

Capital investment is a crucial aspect in supporting the operational strength of SMEs (Pardiman et al., 2022). Enhanced access to financing tends to broaden their market reach and achieve higher growth rates by increasing production capacity and diversifying product offerings (Nyagope, 2023). Additionally, adequate capital helps SMEs manage risks associated with business operations and external shocks (Nautwima, J & Asa, 2021). With sufficient financial buffers, SMEs can withstand changes in economic conditions such as rising input costs and various operational financing activities. Furthermore, according to (Ruslan, R, A et al., 2020), finance and capital are fundamental for the growth and development(Singh, 2022) of SMEs. This enables investments in technology (Kurniasari et al., 2023), market expansion (Kumar & Bahl, 2023), and effective risk management (Chikwira et al., 2022). However, SMEs often face challenges in securing capital, whether through personal funds or loans (Yunus, 2021).

In Indonesia, the government has implemented capital funding through microfinance managed by Microfinance Institutions (MFIs). Microfinance is a form of financing aimed at low to middle-income communities, particularly micro-scale entrepreneurs. It was established to empower micro, small, and medium enterprises (MSMEs) in terms of capital, savings management, and business development consulting services (OJK, 2017). The government's efforts in empowering SMEs through microfinance have continuously developed by increasing the number of Microfinance Institutions (MFIs) and the disbursed capital loans. According to the Financial Services Authority

(OJK) in 2023, the number of MFIs in 2022 was 242, up from 226 in 2021. Central Java Province has the highest number of MFIs, totaling 118, which accounts for 48.76% of the total MFIs in Indonesia.The growth in the number of MFIs corresponds with the increasing number of SMEs securing capital loans to enhance their business capacities. In 2022, there were 171,993 SMEs that took out capital loans, reflecting an average annual increase of 56.61% from 2018, when the number was only 28,588. Since the enactment of the Microfinance Institutions Act in 2015 until the end of 2022, the aggregate assets of MFIs nationally have experienced significant growth, with an average annual increase of 19.29% (OJK, 2023). These assets rose from Rp748.34 billion in 2018 to Rp1.52 trillion in 2022. Alongside this asset growth, the amount of loans disbursed by MFIs also showed an increase, from Rp457.82 billion in 2018 to Rp945.63 billion in 2022, with an average annual growth rate of 19.88% since 2018 (OJK, 2023).Moreover, the size of loans disbursed by MFIs varies, depending on their assets and regulations. The average loan amount ranges from Rp2,000,000 to Rp50,000,000. However, some MFIs provide loans up to Rp250,000,000.

According to (Nursini, 2020 and Lwesya et al, 2023), microfinance is a key factor in supporting the growth and development of Micro, Small, and Medium Enterprises (MSMEs) in various countries, particularly Indonesia. Microfinance disbursed through Microfinance Institutions (MFIs) focuses on providing financial services to MSMEs that are not covered by traditional banking loans. Products offered by MFIs include small and large-scale financial loans and micro-interest insurance, which help MSMEs expand and innovate. Several studies by (Akinadewo, 2020., Oshora et al., 2020 and Audu et al., 2021) indicate that microfinance disbursed by MFIs has a positive impact on the growth and development of MSMEs. The accessibility of microfinance allows small business owners to increase production scale through the acquisition of equipment and raw materials, hiring additional staff, and creating product diversification (Wasike, 2023). Additionally, according to (Karitu & Muathe, 2023) microfinance encourages MSMEs to expand their market presence through activities such as training and development, networking, partnership, and market penetration. Sumawidjaja (2021), indicate that access to microfinance capital through MFIs has a positive impact on supporting the growth and development of MSMEs. Microfinance serves as a source of capital for reaching impoverished communities and MSMEs that have not yet benefited from formal financial institutions (Hassan, A, S, 2020 and Jalil et al., 2022). Informal financial institutions are considered more effective among MSMEs because they are more flexible regarding the terms and amounts of loans, and their credit requirements and disbursement processes are not as stringent as those of banks (Ibenta, 2021and Abrar et al., 2021).

Based on this background, this study will focus on a quantitative analysis of the impact of microfinance on the market growth of SMEs in Indonesia. Using data from the 2022 Indonesian Micro and Small Business Survey, this research aims to identify the extent to which access to microfinance can enhance SMEs' ability to expand their market reach. The importance of this study lies in its potential to provide valuable insights for policymakers, financial institutions, and SME owners in formulating effective strategies to support the sustainability and development of SMEs. Understanding the impact of microfinance on market expansion can aid in designing more targeted interventions that can drive economic growth and reduce poverty in Indonesia.

METHODS

Research Design

The research design employs a quantitative approach to obtain an objective statistical measurement of the relationship between independent and dependent variables. In this context, the quantitative approach is used to assess the impact of different types of microfinance—specifically cooperative loans, non-bank financial institutions (NBFIs), and People's Business Credit (KUR)—on the income of micro, small, and medium enterprises (MSMEs). The quantitative research approach aims to identify patterns and causal relationships between variables through multiple linear regression analysis. According to Creswell (2014), this approach allows researchers to utilize numerical data that can be analyzed using robust statistical methods, enabling the results to be systematically interpreted and generalized to a broader context. By employing this approach, the study can comprehensively address research questions and provide clear empirical evidence regarding the impact of each type of microfinance on the performance of various industry sectors, in accordance with the Indonesian Standard Industrial Classification (KBLI).

Data

This study utilizes secondary data from the Statistics Indonesia (BPS) 2022 report titled *Pencacahan Usaha/Perusahaan Survei Industri Mikro dan Kecil (IMK) 2022 Tahunan*. The Micro and Small Industry Survey (IMK) is one of the survey activities conducted by BPS to provide a comprehensive overview and profile of micro and small industries (IMK) in Indonesia. The aim of this survey is to deliver accurate and detailed information that serves as a foundation for national economic development planning, particularly within the MSME sector. The target of this survey includes micro and small enterprises, specifically industries classified as Micro and Small Industry (IMK). According to the collected data, the survey covers 24 business sectors grouped within the Indonesian Standard Industrial Classification (KBLI), facilitating a comprehensive analysis of various MSME sectors in Indonesia.

The data used in this study encompasses all sectors of micro, small, and medium enterprises (MSMEs) across Indonesia, with the primary focus on microfinance types and MSME income within each business sector. Data on microfinance comes from three main sources: cooperative loans, non-bank financial institutions (NBFIs), and subsidized People's Business Credit (KUR). These variables were selected as they represent the most commonly accessed microfinance sources for MSME operators. Additionally, the types of financing are used to measure their effectiveness and significance regarding MSME income in each sector. Previous research indicates that access to appropriate financing sources can enhance MSME productivity and competitiveness, ultimately impacting income growth and economic development in these sectors. Furthermore, this study aims to identify and analyze the impact of each type of financing on income across MSME sectors categorized under the KBLI classification. As noted by previous studies, microfinance, particularly government subsidies such as KUR, has demonstrated a significant positive impact on small business growth in developing countries. This research also considers literature highlighting the role of cooperatives and NBFIs as crucial alternatives in MSME financing, especially in sectors potentially underserved by traditional banking institutions. Table 1 provides a detailed description of the data types used, while Table 2 presents the descriptions for each KBLI code.

Tabel 1. List of variables used in the study

No	Variable	Description
1.	UMKM Income	Total income generated by Micro, Small, and Medium Enterprises (UMKM) in each business sector based on KBLI classification. Measured in currency (Rupiah) for the year 2022.
2.	Cooperative Loans	The amount of financing received by UMKM from cooperatives. This financing typically has lower interest rates with more flexible terms compared to banks.
3.	Non-Bank financial Institutions	Financing received by UMKM from non-bank financial institutions, such as finance companies, venture capital, and other microfinance institutions.
4.	People's Business Credit (KUR)	Government-subsidized credit provided through banks to UMKM to improve access to financing with lower interest rates.
5.	KBLI	Indonesian Standard Industrial Classification, which groups UMKM business sectors. This research includes 24 different sectors.

Source: data processed by researchers

Table 2. Description of MSME Sectors According to KBLI

No	KBLI Code	Description	Number of MSMEs	
			Mikro	Small
1	10	Food	1556354	35964
2	11	Beverages	100860	1675
3	12	Tobacco Industries	98716	97905
4	13	Textiles	298475	5010
5	14	Apparel	572480	22432
6	15	Leather, Leather Goods and Footwear	54469	6291
7	16	Wood, Wood Products, and Cork (Excluding Furniture), and Articles of Straw, Bamboo, Rattan, and Similar Materials	602059	6472
8	17	Paper and Paper Products	4674	533
9	18	Printing and Reproduction of Recorded Media	27306	3966
10	20	Chemicals and Chemical Products	31135	632
11	21	Pharmaceuticals, Medicinal Chemical Products, and Traditional Medicines	17755	581
12	22	Rubber and Plastic Products	5344	869
13	23	Non-Metallic Mineral Products	203482	14613
14	24	Basic Metals	7732	125
15	25	Fabricated Metal Products, Except Machinery and Equipment	124827	5029
16	26	Computers, Electronics, and Optical Products	607	32
17	27	Electrical Equipment	1643	306
18	28	Machinery and Equipment Not Elsewhere Classified (n.e.c.)	2504	588
19	29	Motor Vehicles, Trailers, and Semi-Trailers	2829	610
20	30	Other Transport Equipment	6061	315
21	31	Furniture	139741	8886
22	32	Other Manufacturing	258448	3188
23	33	Repair and Installation of Machinery and Equipment.	5368	337
		Total	4122869	216359

Source: BPS, 2022

Analytical Framework

For the Analytical Framework, we will focus on the Multiple Linear Regression Analysis, which is used to determine the influence of multiple independent variables (in this case, types of microfinance: Cooperative Loans, Non-Bank Financial Institutions (LK Bukan Bank), and People's Business Credit (KUR)) on a dependent variable (the performance or income of the industries in various KBLI sectors). Multiple Linear Regression (MLR) is a statistical technique that models the relationship between a dependent variable and two or more independent variables. It is used to predict the value of a dependent variable based on the values of the independent variables. In this research, MLR helps determine the impact of different types of microfinance on the income of UMKM (Micro, Small, and Medium Enterprises) across various industrial sectors classified under KBLI. The mathematical expression of the model is given by Equation 1:

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$$Y_i = \beta_0 + \sum_{j=1}^{n} \beta_j X_{ij} + \varepsilon_i \quad i = 1, 2, \dots, n \qquad (Equation\ 1)$$

where:
- Yi denotes the income performance (total revenue) of the iii-th enterprise in a specific KBLI sector.
- Xij is a vector of explanatory variables, including types of microfinance such as Cooperative Loans, Non-Bank Financial Institutions (LK Bukan Bank), and People's Business Credit (KUR), along with other potential variables like business size, business age, ownership structure, and sector-specific characteristics.
- β0 represents the regression constant, indicating the baseline level of income when all explanatory variables are zero.
- βj are the coefficients of the variables estimated in the model, representing the impact of each type of microfinance on the income of the enterprises.
- εi the model error term, accounting for the variability in income not explained by the explanatory variables included in the model.

RESULTS AND DISCUSSION

The data used in this study is derived from the 2022 Micro and Small Industry Survey conducted by Statistics Indonesia (Badan Pusat Statistik, BPS). The survey collected comprehensive information from micro and small enterprises across Indonesia, providing a robust dataset for analysis. This study employs a multiple linear regression method to examine the impact of various types of microfinance on the income of micro, small, and medium enterprises (MSMEs) in Indonesia. The types of microfinance considered in this analysis include cooperative loans, non-bank financial institutions, and government-subsidized People's Business Credit (Kredit Usaha Rakyat, KUR).The results of the regression analysis are detailed in the table below, illustrating the influence of different microfinance types on the income of MSMEs across various sectors in Indonesia:

Table 3. Impact of Microfinance Types on the Income of Different MSME Sectors in Indonesia

KBLI	Cooperative Loans	Non-Bank Financial Institutions	(KUR)
10	-56,340	$28{,}320^{ns}$	$194{,}47^{***}$
11	$13{,}477^{ns}$	$-55{,}010^{ns}$	$-3{,}099^{ns}$
12	$320{,}307^{*}$	$191{,}961^{ns}$	$206{,}380^{***}$
13	$-41{,}645^{ns}$	$108{,}859^{*}$	$16{,}987^{ns}$
14	$-40{,}818^{ns}$	$-19{,}686^{ns}$	$66{,}579^{**}$
15	$1{,}161^{ns}$	$1{,}950^{ns}$	$0{,}322^{ns}$
16	$-23{,}547^{ns}$	$-171{,}243^{ns}$	$45{,}897^{ns}$
17	$281{,}796^{ns}$	-	$-144{,}410^{ns}$
18	$-282{,}\ 005^{ns}$	$949{,}\ 791^{ns}$	$-52{,}\ 096^{ns}$
20	$-264{,}\ 552^{ns}$	$154{,}\ 447^{ns}$	$394{,}\ 010^{***}$
21	$8{,}045^{ns}$	$-52{,}822^{ns}$	$56{,}117^{ns}$
22	$-82{,}757^{ns}$	-	$144{,}582^{ns}$
23	$35{,}430^{ns}$	$109{,}275^{ns}$	$-6{,}809^{ns}$
24	$512{,}357^{ns}$	-	$75{,}647^{ns}$
25	$-56{,}116^{ns}$	$-165{,}677^{ns}$	$64{,}690^{ns}$
26	$-3{,}214^{ns}$	-	$-18{,}862^{ns}$
27	$-690{,}052^{ns}$	-	$537{,}898^{ns}$
28	$20{,}926^{ns}$	-	$-614{,}394^{ns}$

29	-	-	0,204^{ns}
30	156,835^{ns}	130,523^{ns}	430,633^{ns}
31	-24,627^{ns}	-27,478^{ns}	-1,796^{ns}
32	-61,295^{ns}	324,358^{ns}	-5 5,688^{ns}
33	-	35,955^{ns}	156,276^{ns}

Sumber : *Data BPS yang telah diolah, 2022*

The analysis results presented in the table above indicate that the microfinance variable of cooperative loans shows a significant positive effect only in KBLI 12, which corresponds to the tobacco processing MSMEs. The obtained regression coefficient is 320.30, meaning that for every IDR 1 increase in cooperative loan financing, there is a corresponding increase in the income of the tobacco processing industry by IDR 320.30. In contrast, the analysis shows that cooperative loan financing does not have a significant effect on other KBLI categories. This suggests that only KBLI 12 (tobacco processing) demonstrates a significant impact on income when utilizing cooperative loans. This phenomenon can be attributed to various factors related to the tobacco industry, the characteristics of cooperatives, and the relevance of cooperative financing schemes to the specific needs of the industry.

Cooperative Loans

Cooperative loans have a significant impact on the income of tobacco processing MSMEs due to the alignment between the characteristics of the financing schemes and the industry's needs. Generally, the tobacco processing industry has a locally managed supply chain, from input sourcing to processing. Cooperatives often play a key role in regulating these supply chains because they have strong ties to local communities. According to (Bouichou et al., 2021), cooperatives help farmers and local entrepreneurs manage their supply chains, provide market access, and ensure sufficient capital circulation to support production activities. Additionally, (Panwar et al., 2024) states that the tobacco processing industry often requires medium-term loans to maintain operational sustainability, which aligns well with the cooperative financing characteristics.

Cooperatives also have specific criteria that must be met to provide suitable financing for various MSME industries. Moreover, cooperatives face various policies and constraints, such as limited capital and flexibility. Generally, cooperatives have limitations in terms of the amount of capital they can provide. Many cooperatives lack sufficient resources to offer large loans, which might be required by other sectors such as textiles (KBLI 13), apparel (KBLI 14), chemicals (KBLI 20), and other industries. These sectors often need significant capital to purchase expensive equipment or undertake large-scale expansions, which are beyond the capacity of most cooperatives. This condition is consistent with the findings of (Kusmiati, et al 2023) who argued that limited capital often becomes a barrier for cooperatives in Indonesia to compete with other financial institutions in providing financing to sectors that require large investments.

The flexibility of financing is another aspect influencing cooperatives in providing capital to specific MSMEs. MSMEs in sectors like textiles, apparel, crafts, and various other industries often need more flexible and diverse financing schemes, such as working capital loans adjusted to seasonal production cycles, export credits, or equipment purchase loans with longer tenors. Such schemes are not always available in all cooperative financing systems. This is consistent with the findings of (Septyanto, 2022) , which indicate that the textile sector in Indonesia tends to prefer formal financial institutions or non-bank financial institutions (LK Bukan Bank) that offer more complex and tailored financial products to meet specific needs.

Non-Bank Financial Institutions

The financing variable from Non-Bank Financial Institutions exhibits similar analytical characteristics to the cooperative financing variable. Financing from Non-Bank Financial Institutions only has a significant impact on KBLI 13 (Textiles) out of the 27 MSME sectors or KBLIs considered in the study. The analysis results in Table 3 indicate that financing from Non-

Bank Financial Institutions has a significant positive effect on the income of MSMEs in KBLI 13 (Textiles). A regression coefficient value of 108.85 suggests that for every Rp 1 increase in financing, there is a corresponding increase in income in the textile sector by Rp 108. However, other KBLIs did not show significant effects when obtaining loans or financing from Non-Bank Financial Institutions. This condition arises due to differences in industry characteristics and financing schemes between MSMEs operating in the textile sector and those in other sectors.

The textile industry in Indonesia is one of the sectors with a long history and is a major driver of the national economy. The textile industry has a highly dynamic and varied production cycle, depending on the type of product (e.g., raw textiles, fabrics, apparel), fashion cycles, and market demand. Consequently, textile companies often require flexible financing that can adapt to varying production cycles and fluctuating working capital needs. According to (Aramonte et al., 2023) , Non-Bank Financial Institutions often offer more flexible loan products focused on specific business needs, such as working capital loans, production machinery leasing, or factoring. This flexibility enables the textile sector to access financing that aligns with its specific needs, especially for working capital and machinery investment.

Furthermore, the textile sector in Indonesia has a high demand for investment in new technologies and more advanced equipment to remain competitive, especially in export markets. Non-Bank Financial Institutions, such as leasing companies, multifinance, or factoring services, have financing schemes suitable for meeting these needs. This is consistent with the findings of (Pazilov et al., 2020) who states that textile companies that invest in technology have an advantage in accelerating production capacity improvements. This condition is due to the access to various capital support schemes from Non-Bank Financial Institutions compared to conventional banks. It is indicated that MSMEs engaged in goods processing, such as textiles, require capital in the form of technology or production-supporting equipment as the main asset for increasing production.

However, due to specific characteristics and regulations of financing from Non-Bank Financial Institutions, not all MSMEs can access such financing. This condition is evident from the analysis results in Table 3, which show that Non-Bank Financial Institutions do not significantly affect other KBLIs because of differences in financing needs, investment scales, and sector preferences. Some sectors, such as the food, beverage, and chemical industries, are better suited to other financing schemes that offer quick working capital with minimal risk. Non-Bank Financial Institutions have regulations that require clear and specific collateral, such as machinery or inventory. These regulations are more suitable for MSMEs in sectors like textiles compared to food processing, beverages, or crafts.

Subsidized People's Business Credit

The next variable is the financing source from the government's subsidized People's Business Credit (KUR). KUR is a financing program provided by the government with low-interest rates and easier requirements compared to commercial loans. The primary goal of KUR is to support MSMEs in Indonesia by facilitating easier access to financing. This concept aligns with the analysis results in Table 3, which show that KUR financing has a greater impact on increasing MSME income across various sectors compared to other microfinance institutions. This condition indicates that KUR financing can reach more sectors to enhance MSME performance. The analysis results in Table 3 demonstrate that KUR financing has a significant positive effect on the income of the food industry sector (KBLI 10), tobacco processing (KBLI 12), apparel manufacturing (KBLI 14), and the chemical and chemical product sector (KBLI 20).

MSMEs operating in the food industry (KBLI 10) are among the sectors most frequently receiving KUR financing support. This is because the food industry is highly relevant to basic societal needs, particularly food security. The demand for working capital in the food industry is very high, especially for purchasing raw materials, processing, and distribution. The analysis results in Table

3 show that the financing variable through KUR has a significant positive impact on the income of the food industry. The obtained coefficient value of 194.47 indicates that for every Rp 1 increase in financing, the income of MSMEs in the food industry increases by Rp 194.47. This finding aligns with research conducted by (Hayati et al., 2024), which shows that access to affordable financing, such as KUR, greatly helps increase production capacity and reduce operating costs in the food industry, ultimately boosting the income of small and medium-sized enterprises. Furthermore, according to (Najib et al., 2021) the food sector comprises many MSMEs that often face limited access to conventional financing due to constraints such as collateral and administrative requirements. Therefore, this industry predominantly relies on KUR financing due to the ease of obtaining capital.

The next significant result occurs in KBLI 12, or the tobacco processing industry. KUR financing is highly relevant to the tobacco processing sector because it requires significant working capital for purchasing raw materials (tobacco), processing, and distribution. The tobacco industry is often supported by local governments due to its high contribution to the local economy and employment absorption. Affordable financing from KUR helps small-scale industry players manage supply chains more efficiently, improve product quality, and optimize sales. The regression coefficient value obtained is 206.38, meaning that for every Rp 1 increase in financing, there is an increase in income of Rp 206.38. The analysis conducted by (Berliansyah & Khoirunnurofik, 2023) shows that KUR is very effective for the tobacco processing industry to maintain the cash flow needed for continuous production, especially amidst the high volatility of raw tobacco prices.

The same condition also occurs in KBLI 14, or the apparel sector, where KUR financing has a significant positive impact on increasing the income of MSMEs in the apparel sector. The apparel industry tends to have a fast production cycle and is highly dependent on market trends and seasons. KUR helps entrepreneurs in this sector have sufficient working capital to purchase raw materials (fabric, accessories) and carry out efficient production. According to (Irfan et al., 2020), the apparel sector requires flexible financing that can be quickly adjusted to changing market trends. This business characteristic aligns with KUR regulations that provide financing schemes with relatively lenient requirements, allowing entrepreneurs to manage cash flow according to seasonal and market needs.

The chemical industry, especially on a small to medium scale, often faces challenges in accessing conventional financing due to high risks. To mitigate these risks, the government encourages various strategic sectors, including the chemical industry, by providing subsidized financing through KUR. The chemical industry has high innovation potential in developing new products that can enhance competitiveness, and KUR provides the capital needed for research, development, and production. The analysis results on the impact of capital on the income of the chemical industry show a significant positive effect. The coefficient value of 394.01 indicates that for every Rp 1 increase in KUR financing, there is an increase in income of Rp 394.01. This result aligns with the findings of (Masruri, 2023) which suggest that KUR plays a crucial role in helping small companies in the chemical sector increase production and expand domestic and export market reach.

The microfinance variable only significantly affects the income of 5 KBLIs out of the 23 KBLIs analyzed. This condition arises due to differences in industry characteristics, the suitability of financing schemes, and the amount of credit needed. Some KBLI sectors require more complex financing schemes or larger amounts than those provided by the three microfinance variables. Industries with high-risk characteristics require very specific forms of financing, and therefore do not benefit from the three microfinance variables. For example, sectors like technology or industries with extreme market volatility rely more on financing from specialized financial institutions or equity investors.

CONCLUSION

This study concludes that different types of microfinance have varying impacts on the income of micro, small, and medium enterprises (MSMEs) in Indonesia. Cooperative loans, non-bank financial institutions, and People's Business Credit (KUR) exhibit diverse effects depending on the industry sector. Overall, these findings underscore the importance of selecting the appropriate microfinance type based on the characteristics of the industry sector. KUR has demonstrated success in enhancing income across various sectors, while cooperative loans and non-bank financial institutions have more sector-specific impacts. This research indicates that appropriate financing strategies can enhance the competitiveness and operational effectiveness of MSMEs in Indonesia.

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