



## **THE IMPACT OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY IN MICRO AND SMALL PROCESSED FOOD ENTERPRISES IN INDONESIA**

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### **ABSTRACT**

*Effective management of working capital is essential for the profitability and long-term sustainability of micro and small-scale processed food businesses. However, at present, the business has not yet developed strong competency in managing working capital efficiently. This can certainly increase the potential for business bankruptcy, especially in the processed food business. This research examines the impact of working capital management, liquidity, and solvency ratios on the profitability of 1,563 micro and 241 small processed food enterprises in Indonesia. Multiple linear regression is used to assess the relationship between working capital management and profitability. The independent variables include the payable deferral period, inventory conversion period, current ratio, and debt-to-asset ratio, while profitability, as the dependent variable, is measured by return on assets (ROA). The findings indicate that both the payable deferral period and debt-to-asset ratio significantly affect the profitability of micro and small businesses, with the current ratio having a particular effect on the profitability of small businesses. These findings suggest that improving financial management practices, such as daily sales optimization and enhanced cash flow monitoring, could significantly enhance profitability in the micro and small processed food sector.*

**Keyword: Business Assets, Debt Terms, Inventory Turnover, Liquidity Ratio, Solvency Ratio**

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## INTRODUCTION

Managing working capital effectively is vital for maintaining production efficiency and minimizing financial risks, which in turn ensures the sustainability of a business. Efficient working capital management plays a key role in supporting business continuity, preventing financial challenges, and fostering long-term sustainability (Sensini & Varquez, 2021). Profitability reflects a company's ability to generate income, and its success in converting capital into products and selling them for a profit suggests that the company manages its working capital well. Strong working capital management also positively impacts profitability, which will continue to improve over time.

Micro and small enterprises (MSEs) serve as key drivers of Indonesia's economy, playing a significant role in the country's industrial and economic growth (Purba et al., 2021). According to data from the Ministry of Cooperatives, Small and Medium Enterprises (2021), which is presented in Appendix 1, Indonesia had 65.5 million MSME businesses in 2019, representing a 1.98% increase from the previous year.

Moreover, micro and small enterprises are the "spearhead" of national economic development in Indonesia because their economic activities are in direct contact with the community (Purba et al., 2021). In 2022, MSMEs contribute 60.55% to GDP, 99.9% to labor absorption, and 60% to total national investment. More specifically, micro and small businesses significantly contribute to that figure. MSMEs also have a positive impact on society because they are able to reduce income inequality or fulfill people's basic needs (minimum welfare level).

Processed food businesses are growing widely today and could increase the number of micro and small enterprise sectors. It is because the commodity has a large domestic market, abundant raw material resources, and forms a pattern of consumption by people who depend on modern packaged food. In addition, data from the Ministry of Industry of the Republic of Indonesia states that the food and beverage sub sector contributes to the gas and non-oil industry GDP, reaching 39.10 percent and 6.55 percent to the national GDP.

The problem micro and small processed food businesses face is their inability to manage working capital. These business people focus more on income than managing business expenses. Then, there is no standard policy for credit, especially in the processed food business. Furthermore, micro and small processed food businesses have the characteristics of products that are not

durable and business turnover on a daily scale, then when the person in a business cannot manage their working capital properly, they will be at high risk of business failure. In addition, the accessibility of small and micro business actors from various aspects (funding, facilities, business information, partnership, licensing, business opportunities, institutional support and promotion) still requires seriousness and government support for its development (Sartono et al., 2024).

Meanwhile, Ukaegbu (2014); Aktas et al., (2015); Chen et al., (2020) state that company performance can be significantly influenced by short-term decisions such as credit for capital. The weak negotiating position of micro and small enterprises, especially in obtaining capital loans to banks, became one of the borrowing inconsistent factors to cover short-term debt needs (Chen, Diaz, Sensini, & Vazquez, 2020). Ultimately, this problem becomes the leading cause of a processed food business's inability to pay obligations and optimize its capital. In other words, this business requires good working capital management.

High profitability does not necessarily indicate that a business has effectively managed its working capital. A business may show high profitability but still struggle with low liquidity due to a current cash shortage. This is evident from the declining ROA values in micro and small businesses, as highlighted in studies by Sukoco et al. (2015) and Supriadi & Utami (2021). Additionally, working capital management strategies must account for business scale, as it significantly impacts operations. Therefore, strategic management that focuses on balancing profitability plays a crucial role in ensuring long-term business growth and sustainability.

Several studies examining the impact of working capital management, as reflected by the Inventory Conversion Period (ICP) and Payables Deferral Period (PDP), on profitability have yielded mixed results. Setiyanto & Aji (2018) found that ICP negatively affects the profitability of small businesses. In contrast, Samosir & Suryawati (2017) reported that ICP has no significant effect on profitability, as measured by ROA. On the other hand, research by Indradewi & Widyarti (2016) revealed that PDP has a significant positive effect on profitability.

While previous research has explored the relationship between working capital management and profitability, few studies have specifically focused on the processed food sector within a single country. This study fills that gap by analyzing micro and small processed food enterprises in Indonesia. Using 2015 data from the Central Statistics Agency's Micro and Small Industry survey, the research examines the impact of working capital on profitability. The goal is to identify which factors in working capital management affect profitability in these businesses. The findings can help business owners prioritize key profitability drivers, while also serving as valuable reference material for developing training

and policy programs targeting micro and small processed food businesses in Indonesia.

## RESEARCH METHOD

This study utilized secondary data from the 2015 survey of micro and small enterprises conducted by the Indonesian Central Statistics Agency, focusing on businesses classified under KBLI 10, which represents the food industry. The type of sample design used in the survey is multistage/phase, which uses more than one probability sampling technique with a probability sample selection method carried out linearly. The data obtained from the survey results amounted to 20,309 businesses. The data is cleaned again to conform to the current description of the characteristics of micro and small businesses. Furthermore, this research uses data from businesses that have capital from other parties or do not fully own their own capital. This is done so this research can see the influence of capital from other parties such as cooperatives, bank loans, and others 18 more comprehensively on profitability. Thus, the data used by researchers for this research amounted to 1,804 businesses, namely 241 small processed food businesses and 1,563 micro businesses.

Data on income, expenditure, net benefit, total assets, current assets, inventory, and debts are processed using the Excel application to obtain research variables, namely Return on Assets (ROA), Payable Deferral Period (PDP), Inventory Conversion Period (ICP), Debt To Asset Ratio (DAR), and Current Ratio (CR) values of each micro and small business in Indonesia. The relationships between variables used in this research are contained in the theoretical framework in Appendix 2.

Descriptive analysis and multiple linear regression analysis were conducted on each data variable. The descriptive analysis was used to observe the distribution and variation of the data, while linear regression was applied to estimate the causal relationship between the profitability variable and the selected independent variables.

ROA, as a dependent variable, is used to measure business profitability. At the same time, the independent variable is represented by the Inventory Conversion Period/ICP (X1) and Payable Deferral Period/PDP (X2) to examine the working capital management of the business. The Average Collection Period (ACP) variable is not estimated due to limited data access, so this research does not focus on the effect of receivables turnover on business profitability.

The Payables Deferral Period (PDP) refers to the time a company takes to settle its debts with suppliers after purchasing raw materials. In other words, PDP is the duration a company uses before paying off its outstanding obligations. When the company commits debt, the cash can be diverted to other business activities for productive business operations. Then, it will impact increasing business profits so that profitability increases.

The Inventory Conversion Period (ICP) indicates the amount of time it takes for a business to convert its "inventory" into cash, either by selling the inventory or converting it into sold products. Problems appear when "inventory" is stored too long, leading to long "outstanding stock," damaged inventory, maintenance, and storage costs in the warehouse. With increased expenditure costs, the company's profit will decrease, so that profitability decreases (Samosir & Suryawati, 2017). ROA, PDP, and ICP are obtained through the following formula (Brigham & Houston, 2019):

$$\text{Return on Assets} = \frac{\text{Net Profit After Tax}}{\text{Total Asset}}$$

$$\text{ICP} = \frac{\text{Stock}}{\text{Cost of Goods} / 365}$$

$$\text{PDP} = \frac{\text{Accounts Payable}}{\text{Cost of Goods Sold} / 365}$$

So, the estimation model is adjusted to the availability of data which can be written in systematical as follows (Suyono, 2015):

$$ROA_i = \beta_0 + \sum_{i=1}^n \beta_i X_i + \varepsilon_i \dots\dots\dots (1)$$

$$ROA_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_i \dots\dots\dots (2)$$

Furthermore, the model also estimates the impact of liquidity and solvency ratios. The liquidity ratio is represented by the Current Ratio (CR), denoted as X3, and the solvency ratio is measured using the Debt to Asset Ratio (DAR), denoted as X4. These ratios are calculated using the following formulas. These calculations help assess the company's ability to manage its short-term obligations and long-term financial health

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

$$\text{Debt to Asset Ratio} = \frac{\text{Total Debt}}{\text{Total Asset}}$$

So that the complete estimation model in this study can be mathematically written as follows:

$$ROA_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon_i \dots\dots\dots (3)$$

Information:

ROA = Return on Asset (%)

X1 = Payables Deferral Period (days)

X2 = Inventory Conversion Period (days)

X3 = Current Ratio (times)

X4 = Debt to Asset Ratio (times)

The hypotheses in this research are as follows:

- H<sub>1</sub>*: The Payables Deferral Period (PDP) significantly affects the profitability of micro and small processed food businesses in Indonesia.
- H<sub>2</sub>*: The Inventory Conversion Period (ICP) has a significant negative effect on the profitability of micro and small processed food businesses in Indonesia
- H<sub>3</sub>*: The Current Ratio (CR) has a significant positive effect on the profitability of micro and small processed food businesses in Indonesia.
- H<sub>4</sub>*: The Debt to Asset Ratio (DAR) has a significant negative effect on the profitability of micro and small processed food businesses in Indonesia.

The regression model is also disaggregated based on the business scale, namely micro and small businesses, to get more complete results. Beside that, the potential problem of heteroscedasticity and autocorrelation is overcome using a robust standard error.

## RESULT AND DISCUSSION

### General Overview of Processed Food Micro and Small Businesses

Micro and Small Enterprises (MSEs) in Indonesia are categorized based on business capital and annual sales results, as outlined in Government Regulation No. 7 of 2021 concerning the Ease, Protection, and Empowerment of Cooperatives and Micro Enterprises. The classifications are as follows:

Classification based on business capital:

- (a) Micro Enterprises: Have a maximum business capital of IDR 1,000,000,000 (one billion rupiahs), excluding land and buildings used for business purposes.
- (b) Small Businesses: Have business capital exceeding IDR 1,000,000,000 (one billion rupiahs) but not exceeding IDR 5,000,000,000 (five billion rupiahs), also excluding land and buildings

Then the classification according to the results of annual sales, can be categorized as follows:

- (a) Micro Enterprises have annual sales of up to IDR 2,000,000,000 (two billion rupiahs);
- (b) Small Business have annual sales exceeding IDR 2,000,000,000 (two billion rupiahs) but not exceeding IDR 15,000,000,000 (fifteen billion rupiahs).

These classifications help define the scope and support mechanisms for micro and small businesses in the processed food sector. Micro and Small enterprises are classified based on KBLI (Standard Classification of Indonesian

Business Fields), where the processed food business is classified as KBLI 10 for the food industry. The types of processed food products carried out by micro and small businesses are tempeh products wrapped in plastic, jelly, amplang, various wet cakes, noodles, bakpia, meatballs, grilled chicken, bread rolls, rice, purple sweet potato bowls, pau cakes, diamond cakes, prawn crackers, rengginang, tolok cakes, tempeh chips, sugar cane, brown palm sugar, tofu, grilled fish, joint jenang, lunkhead, vegetable sugar, donuts, pindang fish, prawn crackers, and others.

Descriptive statistics offer a summary of the research subjects, specifically micro and small businesses, and are presented in Table 1 and Table 2. These tables encapsulate key data points and characteristics of the businesses analyzed, allowing for a clearer understanding of their overall profile and performance.

Table 1. Descriptive Analysis of Variables in Indonesia's Processed Food Microenterprises

Variable	Mean	Standard Deviation
Return On Asset/ROA (%)	0.797	5.287
Payables Deferral Period/PDP (Days)	431.078	469.111
Inventory Conversion Period/ICP (Days)	37.279	105.444
Current Ratio/CR (times)	0.613	1.439
Debt to Asset Ratio/DAR (times)	0.475	0.203

Source: Statistic Indonesia Agency, 2015

Table 2. Descriptive Analysis Of Variables in Indonesia's Processed Food Small Enterprises

Variable	Mean	Standard deviation
Return On Asset/ROA (%)	0.259	0.680
Payables Deferral Period/PDP (Days)	352.875	403.079
Inventory Conversion Period/ICP (Days)	34.871	69.165
Current Ratio/CR (times)	0.476	0.634
Debt to Asset Ratio/DAR (times)	0.454	0.193

Source: Statistic Indonesia Agency, 2015

Table 1. and 2. show that microenterprises have an average PDP value of 432 days while small businesses have 353 days, so microenterprises' debt repayments are longer than small businesses. Thus, the interest expense paid by microenterprises is greater than that of small businesses.

The length of inventory turnover into cash in micro-enterprises is also longer than that of small businesses. Micro-enterprises have an average Inventory Conversion Period (ICP) value of 37 days, greater than that of small businesses, which is 34 days. Based on this, it is indicated that small businesses are faster at converting inventory into cash than micro-enterprises. The result

shows that small businesses are more effective and efficient in managing inventory, so the company more quickly receives profits from one business cycle.

The debt-to-asset value of micro-enterprises of 0.465 is also more significant than that of small businesses at 0.454. The results show that micro-enterprises use more debt for capital than small businesses. However, the current ratio of small businesses is greater than that of micro-enterprises, which is 0.613 in micro-enterprises and 0.476 in small businesses. The result shows that the risk of debt default in micro-enterprises is greater than that of small businesses because the debt ratio is more than the company's assets.

Furthermore, the sources of capital for the processed food micro and small enterprises studied came from themselves and other parties, namely, bank loans, non-bank financial institution loans, cooperative loans, loans from individuals, venture capital, family/family loans, and others. The sources of capital from other parties most widely used by processed food micro and small businesses are bank loans, family loans, and cooperative loans. Figure 1 illustrates the distribution of capital sources for micro and small processed food enterprises in Indonesia.

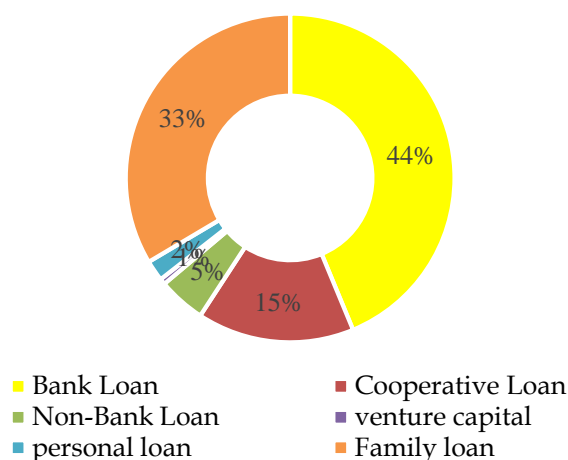


Figure 1.  
Sources Of Capital From Other Parties (Ministry of Cooperatives, 2021)

### **The Impact of Working Capital Management on Profitability of Processed Food Micro and Small Businesses**

The impact of working capital management on profitability is presented in Table 3. To address potential issues of heteroscedasticity and autocorrelation, robust standard errors are used in this research, ensuring that classical assumptions are satisfied. This approach enhances the reliability of the findings regarding the relationship between working capital management and the profitability of micro and small processed food businesses



Table 3. Regression Results on the Impact of Capital Management on Profitability

Variable	Coef.	Robust Std. Err.	P >  t
Payables Deferral Period/PDP (Days)	-0.001***	0.000	0.000
Inventory Conversion Period/ICP (Days)	-0.001	0.000	0.163
Current Ratio/CR (times)	0.175	0.142	0.219
Debt to Asset Ratio/DAR (times)	1.351***	0.301	0.000
Size (Dummy, 0 = micro businesses, 1 = small businesses)	-0.537***	0.136	0.000

Robust standard errors are provided in parentheses

\*\*\*  $\alpha < 0,01$ , \*\*  $\alpha < 0,05$ , \*  $\alpha < 0,1$

Source: Statistic Indonesia Agency, 2015

Results of Data Analysis are presented in Table 3:

1. Payables Deferral Period (PDP): The PDP negatively affects the profitability of micro and small businesses, indicated by a p-value of  $< 0.01$  and a coefficient of -0.001. This suggests that for each additional day that the payable deferral period is extended, the profitability of these enterprises decreases by 0.01 %. Therefore, Hypothesis 1 (H1) is rejected
2. Inventory Conversion Period (ICP): The ICP does not significantly affect the profitability of micro and small businesses. Although it shows a negative coefficient, the insignificance of the results indicates that the duration for which these enterprises hold inventory does not impact their profitability. Thus, Hypothesis 2 (H2) is rejected
3. Current Ratio (CR): The CR also does not have a significant effect on the profitability of micro and small processed food enterprises. While it demonstrates a positive coefficient, its insignificance means it does not influence profitability. Therefore, Hypothesis 3 (H3) is rejected.
4. Debt to Asset Ratio (DAR): The DAR significantly positively impacts the profitability of micro and small processed food enterprises, with a p-value of  $< 0.01$  and a coefficient of 1.351. This indicates that to enhance business solvency, these enterprises can improve their profitability by increasing the proportion of debt in their capital structure. Hence, Hypothesis 4 (H4) is accepted
5. Business Scale (Size): The business scale negatively affects the profitability of micro and small processed food enterprises, as shown by a p-value of  $< 0.01$  and a coefficient of -0.537. This finding suggests that as the size of the business increases, its profitability tends to decrease. Therefore, Hypothesis 5 (H5) is rejected.

The regression results in Table 3. show that three variables significantly affect profitability. The variable Payables Deferral Period / PDP significantly negatively affects the profitability of processed food micro and small businesses

in Indonesia with a coefficient of -0.001. In other words, the sooner the debt repayment period for processed food micro and small enterprises, the more profitability will increase.

The negative influence is because income for a return on investment (including paying production debt) in micro and small processed food enterprises occurs daily. When the business succeeds in paying the daily business debt, it is indicated that the profit received on that day breaks with the payment of the debt made. When debt is paid over a longer time, it is indicated that the capital turnover on one trading cycle does not go smoothly.

Another reason that causes the PDP to affect profitability negatively is that the daily debt pattern carried out by micro and small processed food enterprises requires these businesses to pay debts promptly to obtain capital, and delays in debt repayment will have cost consequences in the form of greater interest. For this reason, the debts paid by micro and small processed food businesses tend to be faster.

The results of the regression differ from those of a study conducted by Geddafa et al., (2020), with case studies on small businesses, showing the average debt repayment time influences profitability significantly positively. The difference in results occurs due to differences in the objects of research conducted. The research of Geddafa et al., (2020) uses large businesses with long periods of debt to reduce income taxes that businesses must incur. Meanwhile, this study uses micro and small processed food businesses so that debt is used for daily business operations. In the business studied, the debt repayment period reflects the smooth receipt of profits in the daily sales cycle.

The debt-to-asset ratio variable has a significant positive impact on the profitability of processed food micro and small businesses in Indonesia, with a coefficient of 1.351. This indicates that as the proportion of debt relative to current assets increases, profitability tends to rise accordingly.

Based on this, in processed food micro and small businesses, debt is used for productive activities to increase the profit the business receives. In addition, it also explains that if the debt owned by micro and small processed food businesses can be adequately utilized, then the business's profitability will increase. These results contrast with the findings of Samosir (2017), which indicated that the Return on Assets (ROA) was significantly negatively impacted by the Debt to Asset Ratio (DAR). The discrepancy in results can be attributed to the fact that, in micro and small processed food businesses, debt is often utilized daily for productive activities, particularly as business capital.

The last variable affecting ROA is the business size (size) analyzed through dummy variables, namely 0 for micro-enterprises and 1 for small businesses. According to the regression results, size has a significant negative impact on Return on Assets (ROA). The result means that processed food businesses will have better profitability when the business is run on a micro-scale than on a small

scale. This negative influence can occur due to an increase in total business assets at a larger business size so that the business manages more capital. However, this capital cannot be rotated optimally, so it is more effective if the processed food business is run on a smaller scale.

Meanwhile, the working capital management variable, Inventory Conversion Period (ICP), did not significantly affect ROA. The regression results show that profitability is significantly negatively influenced by ICP. The result is insignificant because the processed food micro and small businesses studied come from KBLI 10, namely the food industry. Hence, it is rare for businesses to store their products but directly sell them on the same day.

ROA is also significantly positively influenced by the Current Ratio (CR). The positive relationship between CR and ROA shows that the greater the current assets in meeting the business' current liabilities, the greater the business profitability will increase. Although the Current Ratio (CR) has a positive coefficient, it does not show a significant effect. This means that even if the CR increases, it does not have a meaningful impact on profitability to grow further.

### **The Impact of Working Capital Management on the Profitability of Processed Food Micro and Small Businesses by Scale (Micro and Small)**

Disaggregation of research subjects by the scale of the effort is carried out. Disaggregation is done because the regression results in Table 4 show that size affects profitability. Thus, regression disaggregation based on the effort's scale is carried out to obtain more complete results. The disaggregation of the regression results is conducted to provide a more detailed examination of the influence of each independent variable—namely, the Payables Deferral Period, Inventory Conversion Period, Current Ratio, and Debt to Asset Ratio—on the dependent variable, Return on Assets (ROA), which represents profitability.

Table 4. Comparison of Regression Results on the Impact of Capital Management on Profitability Based on Business Scale

Variable	Microenterprises coefficient	Small enterprises coefficient
Payables Deferral Period/PDP (Days)	-0.001***	-0.000***
Inventory Conversion Period/ICP (Days)	-0.001	-0.001
Current Ratio/CR (times)	-0.172	0.226*
Debt to Asset Ratio/DAR (times)	1.402***	0.637***
Size (Dummy , 0 = micro enterprises, 1 = small businesses)	-0.001***	-0.000***

Robust standard errors are provided in parentheses

\*\*\*  $\alpha < 0,01$ , \*\*  $\alpha < 0,05$ , \*  $\alpha < 0,1$

Source: Statistic Indonesia Agency, 2015

A comparison of the regression results for the two business scales is presented in Table 4. The data analysis reveals the following findings:

1. Payables Deferral Period (PDP): This variable negatively affects the profitability of micro and small processed food enterprises, as indicated by a p-value of  $< 0.01$  and coefficient values of  $-0.001$  for micro-enterprises and  $-0.000$  for small businesses. Therefore, hypothesis 1 (H1) is rejected
2. Inventory Conversion Period (ICP): There is no significant effect on the profitability of micro and small processed food enterprises, with coefficient values of  $-0.001$  for both scales. As a result, hypothesis 2 (H2) is rejected
3. Current Ratio (CR): This variable has a significant negative effect on the profitability of small businesses, evidenced by a p-value of  $< 0.1$  and a coefficient value of  $-0.226$ . In contrast, CR does not significantly impact the profitability of micro-enterprises, with a coefficient value of  $-0.172$ . Thus, hypothesis 3 (H3) is accepted only for small businesses but rejected for micro-enterprises
4. Debt to Asset Ratio (DAR): This variable has a significant positive effect on the profitability of both micro and small processed food enterprises, with a p-value of  $< 0.01$  and coefficient values of  $1.402$  for micro-enterprises and  $0.637$  for small businesses. Consequently, hypothesis 4 (H4) is accepted

Table 4 displays a significant comparison of the impact of working capital management on profitability across different business scales. Overall, there are differences in regression results in businesses that are distinguished by business scale and not. The current ratio (CR) variable shows the difference in results. The Current Ratio (CR) had no significant effect according to the results of the combined regression analysis. Meanwhile, the aggregated regression results based on business size indicate that the Current Ratio (CR) has a positive effect on profitability.

The regression results explained that the significant influence of PDP and DAR variables on micro-enterprises was greater than that of small businesses. This shows that the decrease or increase in the value of PDP and DAR in processed food category businesses is more influential for micro-enterprises than small businesses. This influence is based on the operational flexibility of micro-enterprises that are stronger than small businesses. This is because micro-enterprises' capital is more considerable than small business. In addition, micro-enterprises can be categorized as businesses in the growth stage so that business expansion opportunities are more significant than small business. This has implications for decisions made by management related to operations, namely

storage of inventory, sources of capital, and payment of business obligations. These implications also have a significant impact on the profitability of the business.

The Payables Deferral Period (PDP) variable reflects working capital management, as indicated by the timing of when the business has settled its debts. The regression results show that PDP negatively influences microenterprises, with coefficients of 0.001 and 0.000 on small businesses. This indicates that when a small business delays debt repayment (in days) or the maturity of an extended debt repayment, the profitability of the business will decrease. In addition, a large part of other parties' sources of capital used by micro and small processed food enterprises are bank loans, family loans, and cooperative loans with an interest expense that creditors must pay. Thus, the longer the debt repayment period by micro-enterprises, the greater the interest burden that the business must pay. With such conditions, interest income can cause more significant business expenses so that business profits decrease and cause ROA to decrease.

Similar findings were reported in Adiwibowo's (2021) research on manufacturing companies, which indicated a significant negative effect of the Payables Deferral Period (PDP) on profitability. However, contrasting results were observed in the studies by Ponsian et al. (2014), focusing on manufacturing companies listed on the Dar Es Salaam Stock Exchange (DSE); Geddafa et al. (2020), which examined small businesses in Kenya; and Adiyanto et al. (2020), which looked at manufacturing companies on the Indonesia and Philippine Stock Exchanges. These studies demonstrated that PDP had a significant positive impact on profitability, as represented by Return on Assets (ROA).

The Inventory Conversion Period (ICP), or business capability, is represented by the duration of inventory management that can be converted into cash for the business. The regression results indicate that ICP has no significant effect on profitability in both micro and small enterprises. This is likely because micro and small businesses typically conduct their operations on a daily basis. Furthermore, the storage of stock by these businesses does not significantly impact profitability.

Setiyanto & Aji (2018) research on companies experiencing financial constraints in the consumer goods sector produced the same findings: ICP did not significantly affect ROA. In contrast, different findings were reported in the studies by Radeya et al. (2022) on manufacturing companies listed on the Indonesia Stock Exchange (IDX) and Faida et al. (2022) on companies in the primary consumer goods sector on the IDX, which indicated that Return on Assets (ROA) is negatively influenced by the Inventory Conversion Period (ICP).

The Current Ratio (CR) enables the company to fulfill its short-term obligations using its liquid assets (current assets). Table 4 shows that CR positively affects small businesses with a coefficient value 0.226. This may

happen because the larger the scale of the business, the capital that is rotated either from the business itself or the investor will be more significant. As a result, the ability of businesses to repay obligations (current debt) using current assets significantly affects transactions, especially in small businesses with a larger business scale.

Similar findings were observed in the research by Wedyaningsih et al. (2019) on consumer goods sub-sector companies listed on the Indonesia Stock Exchange, which showed a significant positive influence of the Current Ratio (CR) on profitability. However, contrasting results were reported in studies by Hantono (2018) on consumer goods companies; Digdowisesiso et al. (2022) on pharmaceutical companies listed on the IDX; and Prijantoro et al. (2022) on manufacturing companies within the consumer goods industry, all of which indicated that profitability is not significantly influenced by CR.

As a solvency ratio, DAR describes the proportion of debt used to finance assets or investments. The regression results indicated a significant positive relationship between profitability and the Debt to Asset Ratio (DAR) in both micro enterprises, with a coefficient of 1.402, and in small businesses, with a coefficient of 0.637. That result indicates that an increase in business profitability will accompany any increase in DAR. Properly managed debt into business capital can increase business profits through product sales.

A higher DAR coefficient value in micro-enterprises indicates that the ability to manage debt repayment from assets owned is more influential on micro-enterprises than small businesses. For this reason, micro-enterprises need a better strategy for repaying debt so as not to fail risk.

Research conducted by Putri et al. (2022) on beverage and food companies listed on the Indonesia Stock Exchange; Luckieta et al. (2021) focusing on LQ45 companies on the IDX; Novita et al. (2022) examining food manufacturing companies on the IDX; and Puka (2022) in the food and beverage sub-sector manufacturing companies on the IDX all demonstrated a significant negative relationship between the Debt to Asset Ratio (DAR) and Return on Assets (ROA). Putri et al., (2022) said that assets obtained from debt would add to the economic resources owned by the company so that it can generate high profits.

However, different results were reported in the research by Wandasari et al. (2021), with the research objects of primarily industrial and chemical companies on the IDX, and Pertiwi (2019) on beverage and food companies listed on the IDX showed a significant negative relationship between DAR and ROA. Meanwhile, research by Zulkarnaen (2018) on insurance companies listed on the IDX, Prabowo et al. (2022) on beverage and food companies on the IDX, and Cahyani (2020) on telecommunications contractor construction companies indicated that there was no significant influence of the Debt to Asset Ratio (DAR) on Return on Assets (ROA).

## CONCLUSION AND SUGGESTION

### Conclusion

This research has novelty regarding the objects studied, namely micro and small businesses in the processed food sector, which still have varying results in previous research or there is still an empirical gap. This research aims to analyze the factors of working capital management that affect the profitability of micro and small processed food enterprises in Indonesia. Based on the results and discussion, it is found that the profitability of micro and small processed food businesses is significantly negatively influenced by the Payables Deferral Period (PDP). Conversely, the inventory conversion period (ICP) does not significantly affect profitability. Additionally, the Debt to Asset Ratio (DAR) positively influences profitability, while the Current Ratio (CR) only significantly impacts small businesses.

Not all components of working capital management affect profitability in micro and small businesses within the processed food sector. PDP has a significant negative effect because delays in debt payments will result in costs in greater interest, so payments for micro and small food businesses tend to be faster. Meanwhile, the Current Ratio (CR) has a significant positive effect only on small businesses. This is because, as the business scale increases, the amount of capital utilized also grows, enhancing the ability of business owners to settle current obligations (debts) with their current assets, which significantly influences business profitability.

### Suggestion

Recommendations from managerial implications are given for the development of processed businesses. Here are some strategic steps that can be taken by micro and small processed food businesses:

1. Negotiate better debt terms with suppliers and optimize cash flow to prioritize debt payments. This is done to ensure that the interest burden is not excessively high, thereby minimizing the costs incurred by the company. This can increase company profits;
2. Have a complete financial record of cash flow so the business can determine the capital structure derived from debt and its management. Thus, business actors can see the performance in debt management;
3. Increase current business assets through the sale of business inventory and cash flow management so that current debt can be paid and can increase the value of cash and business savings at the bank.

Apart from that, micro and small business can also increase their understanding of business by participating in various programs provided by the government. Sustainability in business continuity can also be achieved by innovating products and encouraging innovation through diversification and creating new processed food products.

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## APPENDIX

### Appendix 1. Number of MSE'S in Indonesia

Scale of Business	Number (unit)
Micro Enterprises	63,955,369
Small Enterprises	193,959
Middle Enterprises	44,728
Big Enterprises	5,550

Source: Ministry of Cooperatives, 2021

## Appendix 2. The Conceptual Research Framework

