

Do Business Types Matter? A Comparative Analysis of Financial Management Quality among MSMEs in Makassar City

Original Article

Muhaidir Ikram*

Departement of Management, Faculty of Economics and Business, Universitas Negeri Makassar, Indonesia

Email: muhaidir.ikram@unm.ac.id

Received : 20 March 2026

Accepted : 29 March 2026

Published online : 22 May 2026

Abstract

This study aims to examine differences in financial management quality among Micro, Small, and Medium Enterprises (MSMEs) in Makassar City based on business type, namely trade, service, and processing industry. This research employed a quantitative comparative design involving 200 MSME actors, selected using a non-probability purposive sampling technique based on respondent eligibility and relevance to the research objectives. Financial management quality was measured using eight indicators: financial transaction recording, separation of personal and business finances, budgeting practice, periodic financial planning, cash flow monitoring, cost control, simple income statement preparation, and financial report-based decision-making. The data were analyzed using descriptive statistics, validity and reliability tests, homogeneity testing, One-Way Analysis of Variance, and Tukey HSD post hoc test. The findings show that financial management quality among MSMEs in Makassar City was generally categorized as good across all business types. Processing industry MSMEs obtained the highest average score, followed by service MSMEs and trade MSMEs. The strongest indicator was the separation of personal and business finances, while simple income statement preparation remained relatively weaker. The comparative test revealed that only cash flow monitoring differed significantly across business types, particularly between trade and processing industry MSMEs. These findings indicate that business type partially differentiates financial management quality, especially in cash flow monitoring. Therefore, MSME financial development programs should be adjusted to the operational characteristics of each business type.

Keywords: *Financial Management Quality, MSMEs, Business Type, Cash Flow Monitoring, Makassar City.*

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in supporting economic development, particularly in emerging economies where small businesses contribute significantly to employment creation, income generation, and local economic resilience (Adomako et al., 2021; OECD, 2021). In Indonesia, MSMEs represent the dominant form of business activity and serve as an important foundation for inclusive economic growth. According to the Badan Pusat Statistik, MSMEs account for more than 97% of all business units in the country, absorbing approximately 97% of the total workforce and contributing around 61% to GDP (Badan Pusat Statistik, 2022). Their contribution spans across various economic sectors, including services, trade, and processing industry (Kementerian Koperasi dan UKM, 2022).



Despite their important role, MSMEs continue to face various managerial challenges that may hinder their sustainability and competitiveness. One of the most critical issues is the quality of financial management (Fatoki, 2021b; Nkundabanyanga, Ssekiziyivu, et al., 2020). Many MSME owners still experience difficulties in recording financial transactions, separating personal and business finances, preparing budgets, managing cash flows, controlling costs, preparing simple financial reports, and using financial information as a basis for business decision-making (Drever et al., 2021; Sitorus & Wijaya, 2022). These weaknesses reduce the ability of MSMEs to measure profitability accurately, maintain working capital stability, access formal financing, and develop long-term business strategies.

Financial management quality is a fundamental aspect of MSME development because it reflects the ability of business owners to manage financial resources effectively (Siekei et al., 2020). Good financial management enables MSMEs to control operational costs, monitor cash inflows and outflows, determine appropriate pricing strategies, evaluate business performance, and make rational investment decisions (Dahmen & Rodriguez, 2014; Lusimbo & Muturi, 2021). Conversely, weak financial management may lead to financial inefficiency, inaccurate profit calculation, uncontrolled expenses, limited access to credit, and increased risk of business failure (Munyengera & Crespo, 2022).

The problem of financial management quality among MSMEs is also related to the gap between financial inclusion and financial literacy (Lusardi & Mitchell, 2022; Ratnawati, 2020). Although many MSMEs have gained access to financial services, such as banking facilities, digital payments, loans, and other financial products, access alone does not guarantee effective financial management. MSME owners need adequate financial knowledge, financial discipline, and managerial capability to transform access to financial services into better business performance (Kara et al., 2021). Without sufficient financial capability, MSMEs may use financial services inefficiently and fail to integrate financial information into daily business management.

Digital financial transformation has further increased the need for stronger financial management among MSMEs (Gomber et al., 2020; Sitorus & Wijaya, 2022). The expansion of digital payment systems, financial technology, and online business transactions provides opportunities for MSMEs to improve efficiency, market access, and transaction transparency (Ozili, 2022). However, digital adoption does not automatically improve financial management quality if MSME owners are unable to record, interpret, and use digital transaction data for financial planning and decision-making (Aribawa, 2021). Therefore, the digitalization of MSMEs must be accompanied by stronger financial literacy, better recording systems, and improved financial control mechanisms.

In the local context, Makassar City is an important economic center in Eastern Indonesia, with diverse business activities across service, trade, and processing industry sectors (BPS Kota Makassar, 2023). The diversity of economic activities in Makassar creates a relevant context for examining MSME financial management quality based on business type. MSMEs in different business sectors may face different financial challenges because each type of business has distinct operational characteristics, cost structures, revenue patterns, working capital needs, and financial risks (Drever et al., 2021).

Previous studies on MSME financial management have generally focused on financial literacy, financial inclusion, financial technology adoption, accounting practices, financial recording, and the relationship between financial management practices and business performance (Fatoki, 2021b). Although these studies have provided important insights, limited attention has been given to comparative analysis of financial management quality based on business type. This gap is important because MSMEs should not be treated as a

homogeneous group, as each business type has different financial problems and may therefore require different forms of financial training, assistance, and policy intervention (Munyengera & Crespo, 2022).

Based on these considerations, this study aims to conduct a comparative analysis of financial management quality among MSMEs in Makassar City based on three business types: service, trade, and processing industry. Using a sample of 200 MSME actors, this study seeks to examine whether financial management quality differs significantly across these business categories. The findings are expected to provide empirical evidence on the role of business type as a distinguishing factor in MSME financial management quality, and to offer practical input for local governments, MSME assistance institutions, and financial training program designers.

2. Literature Review

2.1. Financial Management Quality in MSMEs

Financial management quality refers to the ability of MSME owners or managers to organize, record, plan, control, and use financial information to support business sustainability (Siekei et al., 2020). In the context of MSMEs, financial management quality encompasses practical financial routines directly related to daily business operations, including regular financial transaction recording, separation of personal and business finances, budget preparation, periodic financial planning, monitoring of cash inflows and outflows, cost control, preparation of simple income statements, and the use of financial reports for decision-making (Drever et al., 2021).

Good financial management quality enables MSMEs to understand their financial position, calculate profit more accurately, control expenses, maintain working capital, and make more rational business decisions (Lusimbo & Muturi, 2021). Conversely, weak financial management may lead to poor cash flow control, inaccurate profit estimation, inefficient use of business capital, and limited readiness to access formal financing (Nkundabanyanga, Ssekiziyivu, et al., 2020). Therefore, financial management quality is an important managerial capability that supports the continuity and competitiveness of MSMEs.

Financial literacy is considered one of the key determinants of financial management quality among MSMEs (Lusardi & Mitchell, 2022; Ratnawati, 2020). MSME owners with higher financial literacy are more likely to maintain regular financial records, prepare budgets, and monitor cash flows systematically (Kara et al., 2021). In Indonesia, several studies have confirmed that financial literacy significantly influences financial management practices and business performance among MSMEs, particularly in urban contexts where market competition is intense (Kusuma et al., 2022).

Financial inclusion also plays an important role in improving financial management quality by expanding MSME access to formal financial services, including savings accounts, credit facilities, insurance, and digital payment systems (Bank Indonesia, 2021; Ozili, 2022). However, financial inclusion is most effective in improving financial management quality when accompanied by financial education and managerial training (Kara et al., 2021). This is consistent with evidence from Indonesian studies, which indicate that financial inclusion alone does not automatically translate into better financial management practices among MSMEs (Aribawa, 2021).

Cash flow management and cost control are two particularly critical components of financial management quality for MSMEs (Munyengera & Crespo, 2022). Effective cash flow monitoring allows MSMEs to anticipate liquidity shortfalls, plan for upcoming expenses, and

avoid over-reliance on informal credit sources (Dahmen & Rodriguez, 2014). Cost control mechanisms, in turn, enable MSMEs to maintain profitability by minimizing unnecessary expenditures and improving operational efficiency (Lusimbo & Muturi, 2021).

2.2. Business Type and Financial Management Quality B

MSMEs operate in different business types with distinct financial characteristics that may influence their financial management practices and challenges (Drever et al., 2021). Service MSMEs generally rely on intangible outputs such as skills, labor, expertise, or customer experience. Their financial management challenges are often related to service pricing, labor cost control, operational expense management, and revenue stability (Siekei et al., 2020). Although service businesses may have fewer inventory problems, they still require strong financial planning and cost control to maintain profitability.

Trade MSMEs have different financial characteristics because their main activity involves buying and selling goods. Financial management in trade businesses is closely related to daily transaction recording, inventory management, sales margin control, receivables management, and cash flow stability (Fatoki, 2021a; Nkundabanyanga, Ssekiziyivu, et al., 2020). Due to the high frequency of transactions, trade MSMEs require consistent financial recording and effective working capital management to avoid stock imbalances and cash shortfalls.

Processing industry MSMEs tend to have more complex financial management needs because they involve production activities. These businesses must manage raw materials, direct labor costs, overhead costs, work-in-process inventory, finished goods inventory, and product pricing (Sitorus & Wijaya, 2022). Therefore, processing industry MSMEs require more detailed cost recording and stronger financial control mechanisms than other business types. Studies have shown that inaccurate calculation of production costs leads to inappropriate pricing decisions, inefficient resource use, and declining competitiveness (Munyengera & Crespo, 2022).

Based on these differences, financial management quality may vary among service, trade, and processing industry MSMEs. Business type may influence how MSMEs record financial transactions, prepare budgets, manage cash flows, control costs, and use financial reports for decision-making (Drever et al., 2021). Therefore, comparing financial management quality across business types is important to identify whether specific MSME sectors require different financial management interventions.

2.3. Previous Research

Previous studies on MSME financial management have generally shown that financial literacy, financial inclusion, fintech adoption, accounting practices, financial recording, budgeting, and cash flow management are important factors in improving MSME performance (Gomber et al., 2020; Lusimbo & Muturi, 2021; Ratnawati, 2020). These studies have contributed to the understanding that financial management capability is closely associated with business growth, sustainability, and competitiveness. However, many previous studies tend to examine MSMEs as a single group without differentiating them based on business type.

In Indonesia, several national studies have examined financial management practices, financial literacy, and business performance of MSMEs in various regions (Aribawa, 2021; Kara et al., 2021; OJK (Otoritas Jasa Keuangan), 2022). While these studies have provided valuable contextual insights, the specific context of Makassar City remains understudied. Moreover, the comparative dimension of financial management quality across different business types has received limited attention in the Indonesian MSME literature.

This creates an important research gap because MSMEs in service, trade, and processing industry sectors have different operational characteristics and financial management needs. Service MSMEs may require stronger control over service costs and labor productivity. Trade MSMEs may require better inventory control, margin management, and cash flow monitoring. Processing industry MSMEs may require more detailed cost accounting and production-based financial control (Drever et al., 2021; Sitorus & Wijaya, 2022).

Therefore, this study differs from previous research by emphasizing a comparative perspective. Rather than only describing the overall level of financial management quality, this study examines whether financial management quality differs significantly among service, trade, and processing industry MSMEs in Makassar City. This comparative approach is expected to provide a more specific understanding of MSME financial management practices based on business characteristics, and to support more targeted policy interventions and financial training programs.

Based on this reasoning, the following hypothesis is proposed:

H₁: There is a significant difference in financial management quality among service, trade, and processing industry MSMEs in Makassar City.

3. Methods

This study used a quantitative comparative research design to examine differences in financial management quality among MSMEs based on business type (Creswell & Creswell, 2022). The quantitative approach was selected because the research objective required the collection of numerical data and systematic statistical testing of differences among groups (Field, 2024). The comparative design is appropriate when a researcher seeks to determine whether two or more groups differ significantly on a particular variable (Fraenkel et al., 2022).

The research was conducted in Makassar City, Indonesia, with the unit of analysis being MSME owners or managers. The population of this study consisted of MSMEs operating in three business categories: service, trade, and processing industry. The sample size was determined using the Cochran/Lemeshow formula because the exact population size of MSME actors in Makassar City based on service, trade, and processing industry categories was not precisely known. With a 95% confidence level, an estimated population proportion of 0.50, and a margin of error of 7%, the minimum required sample size was 196 respondents. Therefore, this study used 200 MSME actors as the final sample. The respondents were selected using a non-probability purposive sampling technique based on predetermined criteria, namely active MSME owners or managers in Makassar City who operated in service, trade, or processing industry sectors and were directly involved in business financial management. (Sugiyono, 2022).

The main variable in this study was Financial Management Quality. This variable was operationalized based on eight indicators: (1) regular financial transaction recording, (2) separation of personal and business finances, (3) budget preparation for business operations, (4) periodic financial planning, (5) monitoring of cash inflows and outflows, (6) cost control to maintain efficiency, (7) preparation of simple income statements, and (8) use of financial reports for decision-making (Drever et al., 2021; Siekei et al., 2020).

Each indicator was measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), to capture respondents' self-reported financial management practices (Pranatawijaya et al., 2019). Higher scores indicate better financial management quality, while lower scores indicate weaker financial management practices. The total score of

the indicators was used to represent the overall level of financial management quality among MSMEs.

The data were analyzed using descriptive and comparative statistical techniques. Descriptive statistics, including means, standard deviations, and frequency distributions, were used to identify the overall financial management quality level and to interpret each indicator (Field, 2024). Before conducting comparative analysis, the instrument quality was examined through validity and reliability testing. Validity was assessed using Pearson product-moment correlation, while reliability was evaluated using Cronbach's alpha coefficient, with a threshold of $\alpha \geq 0.70$ considered acceptable.

To test differences in financial management quality based on business type, One-Way ANOVA was applied if the data met the assumptions of normality and homogeneity of variance (Creswell & Creswell, 2022). Normality was assessed using the Shapiro-Wilk test, and homogeneity of variance was examined using Levene's test. If these parametric assumptions were not fulfilled, the Kruskal-Wallis test was applied as a non-parametric alternative. When significant differences were found, post-hoc testing was conducted to identify which specific business types differed significantly from each other. Tukey's HSD was used following ANOVA, and Dunn's post-hoc test was used following the Kruskal-Wallis test.

4. Results and Discussion

4.1. Respondent Characteristics

All This study involved 200 MSME actors in Makassar City. The respondents were classified based on gender, educational background, business experience, and business type. Overall, the respondent profile shows that the sample was dominated by female respondents, respondents with undergraduate education, MSME actors with less than one year of business experience, and businesses operating in the trade sector.

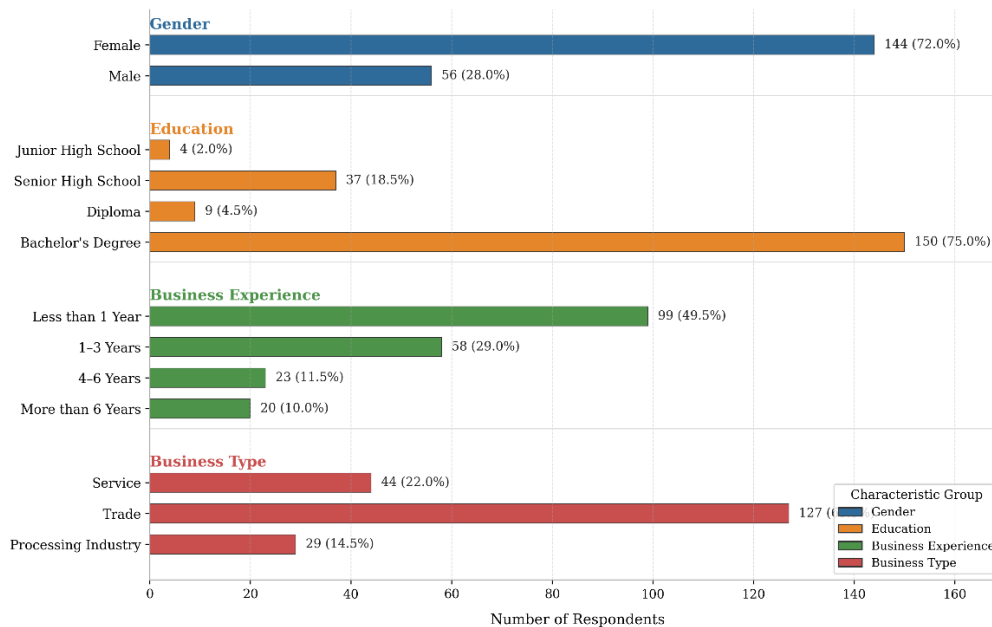


Figure 1. Respondent Characteristic

The respondent characteristics show that female MSME actors accounted for the majority of the sample, representing 72.0% of total respondents. In terms of education, most

respondents had completed undergraduate education, representing 75.0% of the sample. Based on business experience, 49.5% of respondents had operated their businesses for less than one year, indicating that many MSMEs in the sample were still in the early stage of business development. In terms of business type, trade MSMEs dominated the sample with 63.5%, followed by service MSMEs with 22.0% and processing industry MSMEs with 14.5%.

4.2. Descriptive Statistics of Financial Management Quality

The descriptive analysis was conducted to compare financial management quality among trade, service, and processing industry MSMEs. The interpretation of mean scores was based on the following criteria: 1.00–1.80 = Very Poor, 1.81–2.60 = Poor, 2.61–3.40 = Fair, 3.41–4.20 = Good, and 4.21–5.00 = Very Good.

Table 1. Descriptive Statistics of Financial Management Quality by Business Type

Indicator	Business Type	Mean	Category
FMQ1 – Financial Transaction Recording	Trade	3.87	Good
	Service	4.05	Good
	Processing Industry	4.10	Good
FMQ2 – Separation of Personal and Business Finances	Trade	4.07	Good
	Service	4.11	Good
	Processing Industry	4.31	Very Good
FMQ3 – Budgeting Practice	Trade	3.87	Good
	Service	3.77	Good
	Processing Industry	4.00	Good
FMQ4 – Periodic Financial Planning	Trade	3.93	Good
	Service	3.95	Good
	Processing Industry	4.00	Good
FMQ5 – Cash Flow Monitoring	Trade	3.83	Good
	Service	3.93	Good
	Processing Industry	4.21	Very Good
FMQ6 – Cost Control	Trade	3.91	Good
	Service	3.86	Good
	Processing Industry	4.07	Good
FMQ7 – Simple Income Statement Preparation	Trade	3.77	Good
	Service	3.82	Good
	Processing Industry	3.86	Good
FMQ8 – Financial Report-Based Decision-Making	Trade	3.94	Good
	Service	3.93	Good
	Processing Industry	4.00	Good
Average Financial Management Quality	Trade	3.90	Good
	Service	3.93	Good
	Processing Industry	4.07	Good

The descriptive results show that financial management quality was generally categorized as Good across all business types. Processing industry MSMEs obtained the highest average score, with a mean of 4.07, followed by service MSMEs with a mean of 3.93, and trade MSMEs with a mean of 3.90. This indicates that although all business types demonstrated good financial management quality, processing industry MSMEs showed the strongest financial management profile compared with service and trade MSMEs.

In the trade sector, all indicators were categorized as Good. The highest mean score was found in Separation of Personal and Business Finances with a mean of 4.07, indicating that trade MSMEs had relatively good financial discipline in separating business and personal funds. The lowest mean score was found in Simple Income Statement Preparation with a mean of 3.77, suggesting that trade MSMEs still need improvement in preparing simple income statements.

In the service sector, all indicators were also categorized as Good. The highest mean score was found in Separation of Personal and Business Finances with a mean of 4.11, followed by Financial Transaction Recording with a mean of 4.05. The lowest mean score was found in Budgeting Practice with a mean of 3.77, indicating that budget preparation remained the weakest aspect among service MSMEs.

In the processing industry sector, most indicators were categorized as Good, while two indicators reached the Very Good category. The highest mean score was found in Separation of Personal and Business Finances with a mean of 4.31, followed by Cash Flow Monitoring with a mean of 4.21. These two indicators indicate that processing industry MSMEs had stronger financial discipline and better cash flow monitoring practices. The lowest mean score in this sector was found in Simple Income Statement Preparation with a mean of 3.86, although it remained in the good category.

Across the three business types, processing industry MSMEs recorded the highest score in all eight indicators. This shows that processing industry MSMEs tended to apply financial management practices more consistently than service and trade MSMEs. Meanwhile, trade MSMEs had the lowest average financial management quality among the three groups, although the score remained in the good category. These findings indicate that business type may influence the strength of financial management practices, particularly because processing industry businesses generally require more systematic control over costs, cash flows, and production-related financial activities.

4.3. Validity and Reliability Tests

The validity test was conducted using Pearson Product-Moment correlation by examining the correlation between each indicator and the total score of financial management quality. The results show that all indicators had positive and significant correlation coefficients with the total score, with significance values below 0.001. Therefore, all indicators were declared valid.

Table 2. Validity Test Results

Code	Indicator	Pearson Correlation	Sig.	Decision
FMQ1	Financial Transaction Recording	0.683	< 0.001	Valid
FMQ2	Separation of Personal and Business Finances	0.678	< 0.001	Valid
FMQ3	Budgeting Practice	0.691	< 0.001	Valid
FMQ4	Periodic Financial Planning	0.763	< 0.001	Valid
FMQ5	Cash Flow Monitoring	0.766	< 0.001	Valid
FMQ6	Cost Control	0.771	< 0.001	Valid
FMQ7	Simple Income Statement Preparation	0.779	< 0.001	Valid
FMQ8	Financial Report-Based Decision-Making	0.762	< 0.001	Valid

The reliability test was conducted using Cronbach’s Alpha to assess the internal consistency of the eight indicators measuring financial management quality. The result showed a Cronbach’s Alpha value of **0.879**, which is above the minimum acceptable threshold of 0.70. This indicates that the instrument had strong internal consistency and was reliable for further analysis.

Table 4. Reliability Test Result

Variable	Cronbach's Alpha	Number of Items	Decision
Financial Management Quality	0.879	8	Reliable

The validity and reliability results confirm that the instrument used in this study was appropriate for measuring financial management quality. All indicators showed significant correlations with the total score, and the Cronbach's Alpha value indicated strong reliability. Therefore, the data were suitable for subsequent comparative analysis.

4.4. Homogeneity and One-Way ANOVA Tests

Before conducting the One-Way ANOVA test, the homogeneity of variance was examined using Levene's test. The results show that all indicators had Levene significance values greater than 0.05. This indicates that the variance across trade, service, and processing industry MSMEs was homogeneous for all financial management quality indicators.

Table 5. Homogeneity and One-Way ANOVA Results

Code	Levene Statistic	Levene Sig.	Homogeneity Decision	F-value	ANOVA Sig.	ANOVA Decision
FMQ1	0.122	0.885	Homogeneous	2.022	0.135	Not Significant
FMQ2	0.455	0.635	Homogeneous	1.321	0.269	Not Significant
FMQ3	0.031	0.969	Homogeneous	0.886	0.414	Not Significant
FMQ4	1.516	0.222	Homogeneous	0.141	0.868	Not Significant
FMQ5	0.932	0.395	Homogeneous	3.098	0.047	Significant
FMQ6	0.111	0.895	Homogeneous	0.829	0.438	Not Significant
FMQ7	2.495	0.085	Homogeneous	0.161	0.851	Not Significant
FMQ8	0.509	0.602	Homogeneous	0.084	0.919	Not Significant

The homogeneity test results indicate that the assumption of equal variance was fulfilled for all indicators. Therefore, the data were appropriate for analysis using One-Way ANOVA. The ANOVA results show that only Cash Flow Monitoring differed significantly across business types, with an F-value of 3.098 and a significance value of 0.047. Since the significance value was below 0.05, this result indicates that trade, service, and processing industry MSMEs differed significantly in how they monitored cash inflows and outflows.

Meanwhile, the other seven indicators had significance values greater than 0.05. This means that there were no statistically significant differences among trade, service, and processing industry MSMEs in terms of financial transaction recording, separation of personal and business finances, budgeting practice, periodic financial planning, cost control, simple income statement preparation, and financial report-based decision-making. These findings suggest that business type does not create broad differences across all dimensions of financial management quality. However, business type appears to matter specifically in the aspect of cash flow monitoring.

4.5. Tukey HSD Post Hoc Test

Since the One-Way ANOVA result showed a significant difference in cash flow monitoring across business types, a Tukey HSD post hoc test was conducted to identify which groups differed significantly.

Table 6. Tukey HSD Post Hoc Test for Cash Flow Monitoring

Indicator	Business Type Comparison	Mean Difference	Sig.	Decision
Cash Flow Monitoring	Trade vs Service	-0.105	0.701	Not Significant
Cash Flow Monitoring	Trade vs Processing Industry	-0.380	0.038	Significant
Cash Flow Monitoring	Service vs Processing Industry	-0.275	0.274	Not Significant

The Tukey HSD post hoc test shows that the significant difference in cash flow monitoring occurred only between trade MSMEs and processing industry MSMEs. The mean difference between trade and processing industry MSMEs was -0.380, with a significance value of 0.038. This indicates that processing industry MSMEs had significantly better cash flow monitoring practices than trade MSMEs.

The comparison between trade and service MSMEs was not significant, with a significance value of 0.701. The comparison between service and processing industry MSMEs was also not significant, with a significance value of 0.274. These results indicate that the main difference in cash flow monitoring occurred between trade MSMEs and processing industry MSMEs.

4.6. Discussion

This study examines and compares the quality of financial management among MSME actors in Makassar City across three business types: service, trade, and processing industry MSMEs. The findings are important because financial management quality is closely associated with business sustainability, resilience, and growth capacity, particularly for micro, small, and medium enterprises operating in developing economies (Fatoki, 2021a; Mukhtar et al., 2023). Unlike studies that examine MSME financial management at a general level, this study provides a more specific sector-based comparison by analysing eight indicators: financial transaction recording, separation of personal and business finances, budgeting practice, periodic financial planning, cash flow monitoring, cost control, simple income statement preparation, and financial report-based decision-making. This approach is relevant because service, trade, and processing industry MSMEs have different operational structures, revenue patterns, cost characteristics, and financial risks.

The descriptive results show that financial management quality was categorised as Good across all three business types, with average means of 3.90 for trade MSMEs, 3.93 for service MSMEs, and 4.07 for processing industry MSMEs. This finding indicates that MSME actors in Makassar City have generally developed adequate financial management practices and show awareness of the importance of financial discipline in business operations. The good category across all groups may reflect the increasing exposure of Indonesian MSMEs to financial literacy programmes, digital financial services, and government-supported MSME development initiatives (Kusuma et al., 2022). However, the absence of a Very Good aggregate score indicates that financial management practices among MSMEs in Makassar City are not yet optimal, particularly in formal financial reporting, structured budgeting, and systematic use of financial information. This result is consistent with Fatimah & Perdana (2022), who found that many Indonesian MSMEs already understand the importance of financial management but still face difficulties in implementing it systematically.

Processing industry MSMEs recorded the highest average financial management quality score among the three groups. This finding can be explained by the operational characteristics of processing businesses, which generally involve more complex financial flows than service or trade enterprises. Processing industry MSMEs must manage raw material procurement, labour costs, overhead expenses, inventory levels, production schedules, and working capital simultaneously, requiring more systematic financial tracking and cost control (Nkundabanyanga, Opiso, et al., 2020; Wahyuni et al., 2022). In this context, financial discipline becomes an operational necessity because poor control over input costs, production expenses, or cash flow may directly disrupt production continuity. In Makassar City, processing industry MSMEs may also benefit from sectoral guidance, business clusters, and government extension programmes that encourage cost-accounting practices and financial record-keeping as part of product development support (Kementerian Koperasi dan UKM, 2022).

The stronger performance of processing industry MSMEs was particularly evident in separation of personal and business finances and cash flow monitoring, both of which reached the Very Good category. The high score on financial separation suggests that processing industry MSMEs are more disciplined in distinguishing business funds from personal funds, which is essential for calculating production costs, determining break-even points, and assessing profitability per production cycle (Adomako et al., 2022). Similarly, strong cash flow monitoring reflects the need to balance cash outflows for raw materials, wages, utilities, and overhead costs with cash inflows from product sales. This result supports Oseifuah & Gyekye (2021), who found that manufacturing-oriented small firms tend to develop more disciplined cash flow monitoring practices because of their capital-intensive and cyclical operations. Thus, the relatively strong financial management culture among processing industry MSMEs in Makassar City appears to be shaped by the operational complexity of production-based businesses.

Trade MSMEs recorded the lowest average score, although their financial management quality remained in the Good category. This finding should not be interpreted as weak financial management, but rather as evidence that trade businesses face different and more dynamic financial pressures. Trade MSMEs are commonly characterised by high transaction volume, rapid inventory turnover, fluctuating margins, receivables management, and daily cash flow pressure (Belas et al., 2020; Sitorus & Wijaya, 2022). In the context of Makassar City, many trade MSMEs operate in retail and informal commercial environments where business owners often prioritise sales activity, stock availability, and customer transactions over formal financial planning and documentation (Badan Pusat Statistik, 2022). The lower score of trade MSMEs may therefore reflect the practical challenge of maintaining structured financial management in a fast-moving transaction-based business environment.

The weakest indicator among trade MSMEs was simple income statement preparation. This result suggests that frequent transaction recording does not automatically develop into structured financial reporting. Trade MSME owners may keep informal notes of sales and expenses, but they may not consistently consolidate such records into simple profit-and-loss statements. This gap between bookkeeping and financial reporting is widely documented in MSME financial management research, where entrepreneurs often record transactions for operational memory but lack the skills or motivation to transform these records into periodic financial statements (Amoako et al., 2021; Tuffour et al., 2022). Preparing even a simple income statement requires the ability to classify revenues and expenses, apply consistent accounting periods, and calculate net income. Therefore, trade MSMEs in Makassar City

require more practical training in simple income statement preparation, not only basic transaction recording.

Service MSMEs occupied an intermediate position, with an average score between trade and processing industry MSMEs. This result is understandable because service businesses have financial characteristics that differ from both trade and processing activities. Service MSMEs depend on intangible outputs such as skills, labour, expertise, customer experience, and service quality. Their financial challenges are strongly related to service pricing, labour cost control, operational expenses, customer-based revenue, and productivity measurement (Nguyen & Nguyen, 2020; Raza et al., 2023). Unlike trade MSMEs that sell physical goods, service MSMEs must determine the financial value of time, labour, expertise, and customer satisfaction. This may explain why service MSMEs in Makassar City showed good but not superior financial management quality.

The weakest indicator among service MSMEs was budgeting practice. This finding may be linked to the flexible and demand-driven nature of service businesses, where revenue is often irregular, project-based, seasonal, or dependent on customer volume. Such revenue uncertainty can make systematic budget preparation more difficult for service MSME owners (Al-Slehat, 2020; Nugroho & Pertiwi, 2021). Service MSMEs may adjust expenses reactively based on incoming revenue rather than prepare formal budgets in advance. This supports Keasey & Watson (2020), who argued that budgeting is often underutilised among small service enterprises because entrepreneurs perceive their revenue environment as too uncertain for formal budget planning. Therefore, financial assistance for service MSMEs in Makassar City should emphasise flexible budgeting models that fit variable income patterns.

Across all business types, separation of personal and business finances emerged as one of the strongest indicators. This finding indicates that MSME actors in Makassar City increasingly understand that mixing personal and business funds can distort profit calculation, weaken accountability, and reduce financial control. The separation of personal and business finances is widely recognised as a foundational practice for business financial accountability because it supports accurate cost tracking, profitability assessment, and tax compliance (Yanto et al., 2023). The strong score on this indicator may reflect the success of financial literacy campaigns and institutional support from Bank Indonesia, OJK, and local government programmes. However, the dominance of this foundational indicator also suggests that more advanced practices, such as income statement preparation and financial report-based decision-making, still need to be strengthened.

In contrast, simple income statement preparation remained a relatively weak indicator, especially among trade and processing industry MSMEs. This pattern suggests a systemic limitation among MSME actors in Makassar City in transforming transaction records into structured financial reports. The difference between bookkeeping and financial reporting is important because bookkeeping only records financial activities, whereas income statement preparation requires classification, summarisation, interpretation, and periodic evaluation (Amoako et al., 2021; Mbroh & Attom, 2020). Without simple income statements, MSMEs may have difficulty identifying profitability trends, evaluating cost efficiency, and making evidence-based pricing or investment decisions. This finding reinforces the need for MSME development programmes that move beyond basic bookkeeping and introduce simple, practical, and sector-specific financial reporting templates.

The One-Way ANOVA results showed that only cash flow monitoring differed significantly across business types, while the other seven indicators did not show significant differences. This finding suggests that business type does not create broad differences across all dimensions of financial management quality. Instead, business type appears to influence

only specific financial practices that are closely tied to operational cash cycles. The non-significant differences in most indicators may indicate that MSMEs in Makassar City share similar financial literacy exposure, institutional environment, and access to financial inclusion programmes (OJK, 2023; Bank Indonesia, 2022). However, the significant difference in cash flow monitoring shows that sector-specific operational characteristics still matter.

The Tukey HSD post hoc test confirmed that the significant difference in cash flow monitoring occurred only between trade MSMEs and processing industry MSMEs. Processing industry MSMEs showed better cash flow monitoring than trade MSMEs, which can be explained by the production cycle that requires planned cash outflows for raw materials, labour, utilities, and overhead costs before sales revenue is fully realised (Nkundabanyanga, Opiso, et al., 2020; Oseifuah & Gyekye, 2021). Trade MSMEs, in contrast, often operate with shorter and more continuous cash cycles based on daily purchases and sales, which may reduce the perceived need for formal cash flow monitoring. However, this condition may also make trade MSMEs vulnerable to liquidity problems when inventory accumulates or sales decline. Therefore, improving cash flow monitoring among trade MSMEs should become a priority intervention in Makassar City.

The findings of this study offer both theoretical and practical implications. Theoretically, this study extends the financial management quality literature by showing that business type only partially differentiates financial management practices, particularly in the domain of cash flow monitoring. This supports a more nuanced view of financial management quality as a multidimensional construct whose sectoral differences are specific rather than universal (Mukhtar et al., 2023; Tuffour et al., 2022). Practically, local governments, MSME assistance institutions, financial institutions, and MSME owners should design sector-based financial training programmes. Trade MSMEs need stronger support in cash flow monitoring and income statement preparation, service MSMEs require budgeting models suitable for variable revenue patterns, and processing industry MSMEs need continued support in formalising financial reporting practices. Thus, MSME development in Makassar City should move from general financial literacy programmes toward more targeted and business-type-specific financial management assistance.

5. Conclusion

This study concludes that the financial management quality of MSMEs in Makassar City is generally in the Good category across the three business types: trade, service, and processing industry MSMEs. Processing industry MSMEs recorded the highest average score, followed by service MSMEs, while trade MSMEs had the lowest average score. The strongest aspect of financial management was the separation of personal and business finances, whereas the relatively weakest aspect was simple income statement preparation. The comparative test showed that only cash flow monitoring differed significantly across business types, with a significant difference found between trade MSMEs and processing industry MSMEs.

Based on these findings, financial assistance programs for MSMEs in Makassar City should be designed according to business type. Trade MSMEs need stronger support in cash flow monitoring and simple income statement preparation. Service MSMEs should improve budgeting practices, while processing industry MSMEs should maintain their strong financial discipline and further strengthen structured financial reporting.

6. References

- Adomako, S., Amankwah-Amoah, J., & Danso, A. (2021). Financial literacy and SME performance: The role of financial knowledge and decision-making. *Journal of Small Business Management*, 59(2), 489–511. <https://doi.org/10.1080/00472778.2020.1824068>
- Adomako, S., Amankwah-Amoah, J., Danso, A., & Uddin, M. (2022). Financial literacy and firm performance: The mediating role of financial capital availability and financial management practices. *Journal of Small Business Management*, 60(3), 806–830. <https://doi.org/10.1080/00472778.2021.1942623>
- Al-Slehat, Z. A. F. (2020). The impact of financial leverage, size and assets structure on firm value: Evidence from industrial sector, Jordan. *International Business Research*, 13(1), 109–120. <https://doi.org/10.5539/ibr.v13n1p109>
- Amoako, G. K., Marfo, E. O., Gyabaah, E. N., & Gyamfi, O. (2021). Accounting records keeping practices of SMEs: Evidence from Kumasi Metropolis, Ghana. *British Journal of Economics, Finance and Management Sciences*, 16(2), 1–16.
- Aribawa, D. (2021). Financial literacy, access to digital financial services, and financial behavior among micro-entrepreneurs in Indonesia. *Jurnal Ekonomi Dan Bisnis*, 24(1), 1–18. <https://doi.org/10.24914/jeb.v24i1.4125>
- Badan Pusat Statistik. (2022). *Statistik usaha mikro kecil dan menengah*. <https://www.bps.go.id>
- Bank Indonesia. (2021). *Laporan Keuangan Inklusif 2021*.
- Belas, J., Gavurova, B., Dvorsky, J., & Kocisova, K. (2020). The impact of the COVID-19 pandemic on challenges in financial management of SMEs. *Ekonomie a Management*, 23(4), 96–110. <https://doi.org/10.15240/tul/001/2020-4-007>
- BPS Kota Makassar. (2023). *Makassar Dalam Angka 2023*.
- Creswell, J. W., & Creswell, J. D. (2022). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (6th ed.). SAGE Publications, Inc.
- Dahmen, P., & Rodriguez, E. (2014). Financial literacy and the success of small businesses: An observation from a small business development center. *Numeracy*, 7(1), Article 3. <https://doi.org/10.5038/1936-4660.7.1.3>
- Drever, A. I., Odders-White, E., Kalish, C. W., Else-Quest, N. M., Heimberg, E. M., & Jankovic, M. E. (2021). Foundations of financial well-being: Insights into the role of executive function, financial socialization, and experience-based learning in childhood and youth. *Journal of Consumer Affairs*, 49(1), 13–38. <https://doi.org/10.1111/joca.12071>
- Fatimah, S., & Perdana, H. (2022). Financial management practices and business performance of MSMEs in Indonesia: The mediating role of financial literacy. *Jurnal Manajemen Dan Kewirausahaan*, 24(1), 45–58. <https://doi.org/10.9744/jmk.24.1.45-58>
- Fatoki, O. (2021a). The financial management practices of immigrant-owned small businesses in South Africa. *Economies*, 9(2), 86. <https://doi.org/10.3390/economies9020086>
- Fatoki, O. (2021b). The financial management practices of new micro enterprises in South Africa. *Journal of Economics and Behavioral Studies*, 12(2), 21–30. [https://doi.org/10.22610/jeb.v12i2\(J\).2989](https://doi.org/10.22610/jeb.v12i2(J).2989)
- Field, A. (2024). *Discovering Statistics Using IBM SPSS Statistics* (6th ed.). SAGE Publications Ltd.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2022). *How to design and evaluate research in education* (10th ed.). McGraw-Hill Education.
- Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2020). On the fintech revolution: Interpreting the forces of innovation, disruption, and transformation

- in financial services. *Journal of Management Information Systems*, 35(1), 220–265. <https://doi.org/10.1080/07421222.2018.1440766>
- Kara, M., Arifin, Z., & Huda, N. (2021). Financial inclusion, financial literacy, and financial behavior of MSMEs: Evidence from Indonesia. *International Journal of Financial Research*, 12(3), 134–145. <https://doi.org/10.5430/ijfr.v12n3p134>
- Keasey, K., & Watson, R. (2020). Financial distress prediction models: A review of their usefulness. *British Journal of Management*, 2(2), 89–102. <https://doi.org/10.1111/j.1467-8551.1991.tb00019.x>
- Kementerian Koperasi dan UKM. (2022). *Laporan kinerja Kementerian Koperasi dan UKM tahun 2022*. <https://www.kemenkopukm.go.id>
- Kusuma, H., Muafi, M., Aji, H. M., & Pamungkas, I. D. (2022). Financial technology and financial literacy: Evidence from micro, small, and medium enterprises in Indonesia. *Journal of Asian Finance, Economics and Business*, 9(2), 303–311. <https://doi.org/10.13106/jafeb.2022.vol9.no2.0303>
- Lusardi, A., & Mitchell, O. S. (2022). The importance of financial literacy: Opening a new field. *Journal of Economic Literature*, 61(2), 1–15. <https://doi.org/10.1257/jel.20221106>
- Lusimbo, E. N., & Muturi, W. (2021). Financial literacy and growth of micro and small enterprises in Kenya: A case of Kakamega Central Sub-County. *International Journal of Economics, Commerce and Management*, 4(6), 828–845.
- Mbroh, J. K., & Attom, B. E. (2020). Accounting and financial control practices adopted by small and micro enterprises in the Cape Coast Metropolitan Area of Ghana. *Asian Journal of Business and Management Sciences*, 1(9), 28–47.
- Mukhtar, S., Munir, M., & Ahmed, S. (2023). Financial management practices and SME performance: A systematic review. *Journal of Small Business and Enterprise Development*, 30(2), 318–341. <https://doi.org/10.1108/JSBED-08-2022-0347>
- Munyengera, G. K., & Crespo, V. (2022). Financial management practices and performance of SMEs: Evidence from Sub-Saharan Africa. *Small Business Economics*, 59(3), 1023–1044. <https://doi.org/10.1007/s11187-021-00522-4>
- Nguyen, T. T., & Nguyen, V. C. (2020). Determinants of profitability of firms in the service sector: Evidence from Vietnam. *Journal of Asian Finance, Economics and Business*, 7(8), 633–640. <https://doi.org/10.13106/jafeb.2020.vol7.no8.633>
- Nkundabanyanga, S. K., Opiso, J., Balunywa, W., & Nkote, I. (2020). Internal auditing, risk management and financial performance of small and medium enterprises in developing economies. *Journal of Small Business and Enterprise Development*, 27(4), 717–742. <https://doi.org/10.1108/JSBED-09-2019-0315>
- Nkundabanyanga, S. K., Ssekiziyivu, B., Kamukama, N., & Muhwezi, M. (2020). Governing SMEs' financial management: A qualitative inquiry into financial literacy and record-keeping. *Journal of Business Research*, 125, 499–510.
- Nugroho, L., & Pertiwi, D. (2021). Business sustainability factors of MSMEs in Indonesia: The role of financial literacy and access to finance. *Jurnal Akuntansi*, 25(2), 151–169. <https://doi.org/10.24912/ja.v25i2.1023>
- OECD. (2021). *OECD SME and Entrepreneurship Outlook 2021*. OECD Publishing. <https://doi.org/10.1787/97a5bbfe-en>
- OJK (Otoritas Jasa Keuangan). (2022). *Survei Nasional Literasi dan Inklusi Keuangan 2022*.
- Oseifuah, E. K., & Gyekye, A. (2021). Cash flow management and small enterprise performance in the Vhembe District, South Africa. *Problems and Perspectives in Management*, 19(1), 368–380. [https://doi.org/10.21511/ppm.19\(1\).2021.29](https://doi.org/10.21511/ppm.19(1).2021.29)
- Ozili, P. K. (2022). Financial inclusion: Globally important determinants. *Financial Internet Quarterly*, 18(1), 1–18. <https://doi.org/10.2478/fiqf-2022-0001>

- Pranatawijaya, V. H., Widiatry, W., Priskila, R., & Putra, P. B. A. A. (2019). Penerapan Skala Likert dan Skala Dikotomi Pada Kuesioner Online. *Jurnal Sains Dan Informatika*, 5(2). <https://doi.org/10.34128/jsi.v5i2.185>
- Ratnawati, K. (2020). The influence of financial inclusion on MSMEs performance through financial intermediation and financial management practices as mediating variables. *Journal of International Studies*, 13(2), 25–39. <https://doi.org/10.14254/2071-8330.2020/13-2/2>
- Raza, S. A., Shah, N., & Basit, A. (2023). Role of financial management practices in the performance of small service firms. *International Journal of Emerging Markets*, 18(5), 1150–1170. <https://doi.org/10.1108/IJOEM-11-2020-1312>
- Siekei, J., Wagoki, J., & Kalio, A. (2020). An assessment of the role of financial literacy on performance of small and micro enterprises: Case of Equity Group Foundation Training Program on MSEs in Njoro District, Kenya. *Business and Economics Journal*, 11(4), 1–8.
- Sitorus, T., & Wijaya, C. (2022). Financial management quality and business performance of trade MSMEs in Indonesia. *Jurnal Riset Akuntansi Dan Keuangan*, 10(1), 65–78. <https://doi.org/10.17509/jrak.v10i1.35567>
- Sugiyono. (2022). *Metode penelitian kuantitatif, kualitatif, dan R&D* (2nd ed.). Alfabeta.
- 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 Journal of Business Research*, 16(1), 29–42.
- Wahyuni, S., Ferdous Azam, S. M., & Bhatt, M. (2022). The influence of financial management practices on financial performance of manufacturing MSMEs in Indonesia. *International Journal of Business and Society*, 23(2), 812–829. <https://doi.org/10.33736/ijbs.4780.2022>
- Yanto, H., Ismail, N., Kiswanto, K., Rahim, N. M., & Baroroh, N. (2023). The roles of peers and parents in financial management behaviour of young Indonesian MSMEs. *Cogent Business & Management*, 10(1), 2178672. <https://doi.org/10.1080/23311975.2023.2178672>