

INTEGRATING FINANCIAL LITERACY ASPECTS IN SMALL AND MEDIUM ENTERPRISE CAPITAL BUDGETING

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INTEGRATING FINANCIAL LITERACY ASPECTS IN SMALL AND MEDIUM ENTERPRISE CAPITAL BUDGETING

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ABSTRACT

This research investigates the significant role of financial literacy in the context of capital budgeting in Micro, Small, and Medium Enterprises (MSMEs). The study focuses on the challenges faced by MSMEs in effectively managing their capital budgets, as well as the potential benefits of integrating financial literacy into their budgeting strategies. Through a comprehensive review of existing literature and case studies, this research emphasizes the importance of providing MSME owners and managers with the financial knowledge and skills necessary to make informed decisions regarding their capital investments. The study highlights various techniques and approaches to enhance financial literacy among MSMEs, emphasizing the importance of understanding financial concepts, risk assessment, and the use of appropriate budgeting. Furthermore, this research examines the impact of increased financial literacy on the overall financial health and sustainability of MSMEs. The research findings indicate that enhanced financial literacy can lead to more efficient capital budgeting practices, better risk management, and improved long-term growth prospects for MSMEs. This research contributes to the ongoing discourse on the role of financial literacy, capital budgeting, and the development of MSMEs, providing valuable insights for decision-makers, practitioners, and stakeholders striving to create an enabling environment for the growth of small and medium enterprises in the global economy.

Keywords : MSMEs, Financial Literacy, Capital Budgeting

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in the global economy. The increasing involvement of Small and Medium Enterprises (SMEs) holds strategic value as they contribute to the creation of additional employment opportunities, contribute to the increase in export volumes, and provide essential services needed by communities in various sectors [1]. Although the number of Micro, Small, and Medium Enterprises (MSMEs) continues to increase in Indonesia, the growth of the MSME sector tends to be sluggish, and in some cases, many

MSMEs have to cease their operations. MSMEs that are not supported by adequate knowledge in entrepreneurship, business management, and financial management tend to experience hindered growth [2]. Despite their significant potential, MSMEs often face various challenges, especially in financial management and capital budgeting. Many MSMEs struggle with cash flow management, understanding investment risks, and making informed financial decisions. Financial literacy, which encompasses an understanding of basic financial concepts and skills in financial management, can be a determining factor in the success of MSMEs in managing their capital. The ability for financial planning, as well as effective and efficient decision-making, is a necessity for SME managers to achieve optimal profits. For effective and efficient financial decision-making, SME managers need to have a good understanding of their business's financial management, known as financial literacy [3].

Understanding financial literacy has become increasingly crucial to ensure the development of a high-quality society with strong financial capabilities. The growing complexity of individual needs and financial products encourages people to have sufficient knowledge of financial literacy. This is aimed at facilitating more accurate financial management. Limited financial literacy is recognized as one of the primary causes of ill-informed financial decisions, which can ultimately have negative consequences. This emphasis is expressed by the Organization for Economic Cooperation and Development / International Network on Financial Education (OECD/INFE 2009) [4].

Financial literacy is the key to understanding, managing, and optimizing the use of financial resources. Understanding financial literacy facilitates the process of comprehending and evaluating the information required to make decisions that impact the financial aspects of a business [5]. Entrepreneurs of MSMEs who have a strong understanding of financial literacy can make better investment decisions, manage risks more effectively, and run their operations more efficiently. However, the reality is that the level of financial literacy among MSME stakeholders is often low. Entrepreneurs

should, at the very least, possess a good understanding of financial literacy or sound financial capabilities. Financial literacy is defined as the mastery of specific knowledge, attitudes, and behaviors considered fundamental in enabling individuals to make responsible decisions to achieve prosperity in their business [6]. If someone has limited financial literacy skills, understanding finance becomes crucial for that individual to avoid making mistakes in investment decision-making [7].

In addition to financial literacy issues, capital budgeting is of utmost importance for MSMEs. Effective capital budgeting enables MSMEs to identify investment opportunities, allocate resources wisely, and ensure sustainable business growth. Financial components have a significant impact on business funding decisions, so MSMEs need to formulate alternative strategies for financing their activities through external sources like loans and internal sources in the form of equity. Capital serves as the primary foundation for MSMEs to sustain their operations, where the use of loans can be advantageous when employed efficiently [8]. However, in a business environment that is often filled with uncertainty, effective capital budgeting requires a strong understanding of capital budgeting techniques that are suitable for the needs of MSMEs. Effective capital budgeting supports investment decision-making, thereby enabling MSMEs to continue to grow.

When financial literacy and appropriate capital budgeting techniques are integrated into the operations of MSMEs, they can help improve financial performance, reduce risks, and provide a more solid foundation for the growth and development of MSMEs. Therefore, research in the field of financial literacy, capital budgeting, and capital budgeting techniques in MSMEs is highly relevant to address the challenges faced by MSMEs and support the sustainable growth of the MSME sector in the global economy [21].

In this context, it is important to understand how the enhancement of financial literacy among owners and managers of MSMEs can influence their capital budgeting practices. The use of appropriate capital budgeting techniques and strategies based on a strong understanding of finance can help MSMEs optimize their resource allocation, reduce involved risks, and enhance their long-term growth. Therefore, research on financial literacy, capital budgeting, and capital budgeting techniques in MSMEs is crucial in supporting the growth and sustainability of the MSME sector, which, in turn, will contribute positively to the overall

economy. Thus, this research is expected to provide profound insights into the importance of financial literacy and effective capital management in the context of MSMEs in the era of the global economy.

2. ETDHOS

The research method employed in this study is a survey method utilizing interviews with Micro, Small, and Medium Enterprise (MSME) owners in Lumajang. The following are the stages of the research method that will be implemented:

1. Sample Selection: MSMEs will be randomly selected with diverse types of businesses and varying locations in Lumajang to create a representative sample.
2. Interviews: The researcher will conduct interviews with MSME owners. The questions posed during the interviews will cover aspects of financial literacy, financial reporting, capital budgeting, capital budgeting techniques, and capital structure. Example questions include:
 - a. Does the MSME have sound financial reports?
 - b. Does the MSME have knowledge of capital budgeting concepts, including capital budgeting techniques and capital structure?
 - c. Can the MSME apply capital budgeting techniques and capital structure in estimating their planned investments?
3. Data Collection: Data obtained from the interviews will be recorded and documented. The data obtained may include responses from MSME owners, sample financial reports, and information related to capital budgeting.
4. Data Processing and Analysis: The collected data will be processed, analyzed, and arranged according to the research framework. Data analysis will involve evaluating the level of financial literacy, understanding of capital budgeting, use of capital budgeting techniques, and capital structure employed by the MSMEs.
5. Data Interpretation: The results of the data analysis will be interpreted to gain a deeper understanding of the level of financial literacy and capital management among MSMEs in Lumajang.
6. Conclusion and Recommendations: The researcher will formulate conclusions based on the results of the data analysis and provide relevant recommendations to enhance financial literacy and capital management among MSMEs in Lumajang. Through the utilization of the survey method and interviews, this research aims to identify the extent to which MSME owners in Lumajang

possess sound knowledge and practices in terms of financial literacy, financial reporting, capital budgeting, as well as capital budgeting techniques and structures. The findings of this research are expected to provide valuable insights to support the development and sustainability of MSMEs in the area.

RESULT AND REVIEW

The data obtained randomly consists of 171 MSMEs operating in Lumajang, East Java, Indonesia, encompassing various types of businesses, including trading, services, and small-scale industries. This research utilizes survey and direct interviews with MSME owners to obtain comprehensive information on the level of financial literacy and capital budgeting practices applied at the enterprise level. Through a series of careful interviews, the interview data reveals a variety of understandings and practices implemented by MSME owners regarding financial reporting, capital budgeting, as well as knowledge of capital budgeting techniques and capital structure. The interview results provide a deep insight into the challenges and opportunities faced by MSMEs in managing their financial aspects amid the dynamics of the local economy. Thus, this data provides a strong foundation for identifying the needs and potential for enhancing financial literacy and capital management among MSMEs in Lumajang. The interview results can be seen in the table below:

TABLE 1 INTERVIEW RESULTS FOR QUESTION 1

The types of MSMEs		Does the MSME have sound financial reports?	Notes
Coffee farmers	1	V	-
Plastic Seed Grinding	1	V	Established in 2015, recycling plastic waste in a rudimentary manner and then delivered to a plastic factory in Mojokerto
Processed Soybeans	2	X	MSMEs are tofu and tempe entrepreneurs.

Photo's Studio	1	X	-
Flower Bucket	2	X	-
Ornamental Flower Farmers	2	X	-
Bamboo Satay Skewer Production	1	V	-
Games Trading	1	X	-
Fruit Store	1	V	-
Palm Sugar Business	1	X	-
Sengon Seedlings	1	X	-
Agricultural Store	1	V	-
Barber Shop	2	X	-
Mushroom Cultivation	1	X	-
Beauty Salon	1	X	-
Sound System and Tent Rental	1	X	-
Livestocks Farming	2	X	MSMEs consist of poultry and salted egg businesses
Cow's Milk	1	X	-
Goat's Milk	1	X	-
Motorcycle seat manufacturing	1	X	-
Motorcycle workshop	1	V	-
Hiking Equipment Rental	1	X	-
Laundry	4	X	-
Cellphone Counter and Credit	6	V	-
Fishery	3	X	MSMEs consist of tilapia and catfish cultivation,

			and fresh fish sales
Bamboo Sales	1	X	-
Furniture	4	V	-
Wood Warehouse	1	X	-
Scaffolding Rental Service	1	X	-
Teak Wood Factory	1	V	-
Fotocopy	4	X	-
Printing Services	1	X	-
Batik	3	X	-
Thrift Shop	1	X	-
T-shirt Printing	6	V	-
Tailor	4	X	-
Coffee or Beverage Stall	16	V	-
Banana Chips	4	X	-
Bakery	6	X	-
Snack and Beverage	19	X	Fried Snacks, Grilled Sausages, Sticky Rice, Chocolate Bananas, Crepes, Tamarind Candy, Coconut Ice, and Fried Dough
Grocery Store/Minimarket	23	X	-
Souvenir Center	1	V	-
Eatery	36	X	Wamindo, Meatball Soup, Fried Rice, Porridge, Fresh Vegetables, Satay, Clams, Chicken Noodles, Canteen, Free

			Stall, Wrapped Rice
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Interview Data Result

From the data above, it can be concluded that there are still many MSMEs that are unable to prepare adequate financial statements. The ideal financial report should include more than just manual recording of income and expenses. It involves maintaining a journal, accounts or ledger, and eventually producing financial statements such as balance sheets and profit and loss statements. Out of the 171 MSMEs sampled, only 40 of them have successfully prepared their financial statements properly. Meanwhile, the remaining 131 MSMEs still use simple financial recording methods. This indicates that there is a gap in the understanding and practice of financial management among MSMEs. Further efforts are needed to provide training and guidance to MSMEs so that they can improve their abilities to prepare more comprehensive and accurate financial reports.

The following are the results of the survey and interviews from the second question regarding whether the MSMEs have financial literacy, particularly in the concept of capital budgeting, capital budgeting techniques, and capital structure can be seen in the table below:

TABLE II INTERVIEW RESULTS FOR QUESTION 2

The types of MSMEs		Does the MSME have knowledge of capital budgeting concepts, including capital budgeting techniques and capital structure?
Coffee farmers	1	already have knowledge about capital budgeting and capital structure
Plastic Seed Grinding	1	simple method, payback period, do not have knowledge about financial literacy
Processed Soybeans	2	simple method, payback period, do not have knowledge about financial literacy
Photo's Studio	1	simple method, payback period, do not have knowledge about financial literacy
Flower Bucket	2	simple method, payback period, do not have knowledge about financial literacy

Ornamental Flower Farmers	2	simple method, payback period, do not have knowledge about financial literacy
Bamboo Satay Skewer Production	1	simple method, payback period, do not have knowledge about financial literacy
Games Trading	1	simple method, payback period, do not have knowledge about financial literacy
Fruit Store	1	simple method, payback period, do not have knowledge about financial literacy
Palm Sugar Business	1	simple method, payback period, do not have knowledge about financial literacy
Sengon Seedlings	1	simple method, payback period, do not have knowledge about financial literacy
Agricultural Store	1	simple method, payback period, do not have knowledge about financial literacy
Barber Shop	2	simple method, payback period, do not have knowledge about financial literacy
Mushroom Cultivation	1	simple method, payback period, do not have knowledge about financial literacy
Beauty Salon	1	simple method, payback period, do not have knowledge about financial literacy
Sound System and Tent Rental	1	simple method, payback period, do not have knowledge about financial literacy
Livestocks Farming	2	simple method, payback period, do not have knowledge about financial literacy
Cow's Milk	1	simple method, payback period, do not have knowledge about financial literacy
Goat's Milk	1	simple method, payback period, do not have knowledge about financial literacy
Motorcycle seat manufacturing	1	simple method, payback period, do not have knowledge about financial literacy
Motorcycle workshop	1	simple method, payback period, do not have knowledge about financial literacy

Hiking Equipment Rental	1	simple method, payback period, do not have knowledge about financial literacy
Laundry	4	simple method, payback period, do not have knowledge about financial literacy
Cellphone Counter and Credit	6	simple method, payback period, do not have knowledge about financial literacy
Fishery	3	simple method, payback period, do not have knowledge about financial literacy
Bamboo Sales	1	simple method, payback period, do not have knowledge about financial literacy
Furniture	4	simple method, payback period, do not have knowledge about financial literacy
Wood Warehouse	1	simple method, payback period, do not have knowledge about financial literacy
Scaffolding Rental Service	1	simple method, payback period, do not have knowledge about financial literacy
Teak Wood Factory	1	simple method, payback period, do not have knowledge about financial literacy
Fotocopy	4	simple method, payback period, do not have knowledge about financial literacy
Printing Services	1	simple method, payback period, do not have knowledge about financial literacy
Batik	3	simple method, payback period, do not have knowledge about financial literacy
Thrift Shop	1	simple method, payback period, do not have knowledge about financial literacy
T-shirt Printing	6	simple method, payback period, do not have knowledge about financial literacy
Tailor	4	simple method, payback period, do not have knowledge about financial literacy
Coffee or Beverage Stall	16	simple method, payback period, do not have knowledge about financial literacy

Banana Chips	4	simple method, payback period, do not have knowledge about financial literacy
Bakery	6	simple method, payback period, do not have knowledge about financial literacy
Snack and Beverage	19	simple method, payback period, do not have knowledge about financial literacy
Grocery Store/Minimarket	23	simple method, payback period, do not have knowledge about financial literacy
Souvenir Center	1	simple method, payback period, do not have knowledge about financial literacy
Eatery	36	simple method, payback period, do not have knowledge about financial literacy

Interview Data Result

From the above data, it is evident that on average, MSMEs are rural communities that will have minimal financial literacy, especially regarding the concept of capital budgeting, capital budgeting techniques, and optimal capital structure. Out of 171 MSMEs, only 1 MSME has a good financial literacy regarding capital planning, while the rest do not. However, a good capital planning will enable their MSMEs to grow and be more directed in their investment plans in the future.

The following are the results of the interviews on capital budgeting techniques and capital structure from the sampled MSMEs :

TABLE III INTERVIEW RESULTS FOR QUESTION 3

The types of MSMEs		Can the MSME apply capital budgeting techniques and capital structure in estimating their planned investments?
Coffee farmers	1	The techniques used are NPV, and the capital structure includes equity and bank loans from BCA
Plastic Seed Grinding	1	The techniques used include the payback period and internal capital
Processed Soybeans	2	The techniques used include the payback period and internal capital

Photo's Studio	1	The techniques used include the payback period and internal capital
Flower Bucket	2	The techniques used include the payback period and internal capital
Ornamental Flower Farmers	2	The techniques used include the payback period and internal capital
Bamboo Satay Skewer Production	1	The techniques used include the payback period and internal capital
Games Trading	1	The techniques used include the payback period and internal capital
Fruit Store	1	The techniques used include the payback period and internal capital
Palm Sugar Business	1	The techniques used include the payback period and internal capital
Sengon Seedlings	1	The techniques used include the payback period and internal capital, as well as land owned by relatives
Agricultural Store	1	The techniques used are the payback period and the cost of Debt capital
Barber Shop	2	The techniques used include the payback period and internal capital
Mushroom Cultivation	1	The techniques used include the payback period and internal capital
Beauty Salon	1	payback period, self-funding, and debt capital
Sound System and Tent Rental	1	payback period, self-funding, and debt capital
Livestocks Farming	2	payback period, self-funding
Cow's Milk	1	payback period, self-funding
Goat's Milk	1	payback period, self-funding
Motorcycle seat manufacturing	1	payback period, self-funding
Motorcycle workshop	1	payback period, self-funding, and debt capital

Hiking Equipment Rental	1	payback period, self-funding
Laundry	4	payback period, self-funding, and debt capital
Cellphone Counter and Credit	6	payback period, initially using self-funding and gradually expanding by adding debt capital
Fishery	3	payback period, initially using self-funding and gradually expanding by adding debt capital
Bamboo Sales	1	payback period, self-funding
Furniture	4	payback period, initially using self-funding and gradually expanding by adding debt capital
Wood Warehouse	1	payback period, initially using self-funding and gradually expanding by adding debt capital
Scaffolding Rental Service	1	payback period, self-funding
Teak Wood Factory	1	payback period, initially using self-funding and gradually expanding by adding debt capital
Fotocopy	4	payback period, self-funding, and debt capital
Printing Services	1	payback period, self-funding, and debt capital
Batik	3	payback period, self-funding
Thrift Shop	1	payback period, self-funding
T-shirt Printing	6	payback period, initially using self-funding and gradually expanding by adding debt capital
Tailor	4	payback period, self-funding
Coffee or Beverage Stall	16	payback period, initially using self-funding and gradually

		expanding by adding debt capital
Banana Chips	4	payback period, initially using self-funding and gradually expanding by adding debt capital
Bakery	6	payback period, initially using self-funding and gradually expanding by adding debt capital
Snack and Beverage	19	payback period, initially using self-funding and gradually expanding by adding debt capital
Grocery Store/Minimarket	23	payback period, initially using self-funding and gradually expanding by adding debt capital
Souvenir Center	1	payback period, initially using self-funding and gradually expanding by adding debt capital
Eatery	36	payback period, initially using self-funding and gradually expanding by adding debt capital

Interview Data Result

From the data above, it is evident that only 1 UMKM uses the Net Present Value (NPV) method for capital budgeting, while 170 UMKM still use the simpler Payback Period method. However, it would be more beneficial if they also incorporate the time value of money into their capital budgeting methods because the value of money in the present and the future differs. This would lead to more accurate estimations for their capital planning and investments.

Regarding capital structure, 22 UMKM utilize their own capital, while 12 UMKM employ a mix of self-funding and debt. Additionally, 126 UMKM initially use self-funding, but as their businesses grow, they start adding capital through debt. There is also one UMKM that relies solely on debt as their capital source.

CONCLUSION

From this research, it can be concluded that financial literacy concerning the concept and techniques of capital budgeting, as well as optimal capital structure, remains a significant challenge for SMEs. Out of the 171 SMEs randomly selected as the research sample, the data indicates that only around 40 SMEs are capable of producing good and systematic

financial reports, while approximately 131 SMEs still rely on manual and simplistic financial recording methods. Therefore, further efforts are needed to provide training and financial literacy education to SMEs to enhance their ability to prepare improved financial reports.

Moreover, financial literacy, especially in capital budgeting, needs to be improved. Based on the research findings, only one out of 171 SMEs is currently using the Net Present Value (NPV) method in their capital budgeting, with the majority still relying on the Payback Period method. This suggests a limited understanding of the present and future value of money. Consequently, more intensive education and guidance regarding the concept of NPV and its benefits in investment decision-making are necessary.

Lastly, concerning capital structure, most SMEs use their equity, with only a few combining equity and debt. This is understandable as SMEs are typically not publicly traded, making the stock component irrelevant to their capital plans. Nevertheless, it's crucial to pay further attention to debt management to ensure SMEs can utilize loans wisely for business development. In conclusion, financial literacy is the key to helping SMEs better plan their capital, manage risk effectively, and ensure sustainable business growth.

REFERENCES

- [1] P. Dyah Regita *et al.*, "Pengaruh Literasi Keuangan, *Financial Capital*, Dan Kebijakan Pemerintah Terhadap Kinerja Usaha Pada Usaha Kecil Dan Menengah Di Jawa Timur", *Journal Of Business and Banking*, Vol. 9 No. 02, November 2019 – April 2020.
- [2] W. Tara S, "Peran Inovasi, Literasi Keuangan, Modal Kerja Dan Kebijakan Pemerintah Dalam Upaya Meningkatkan Kinerja UKM", *Jurnal Ilmiah Manajemen Bisnis Dan Inovasi Universitas Sam Ratulangi (Jambi UNSRAT)*, Vol. 09 No. 03, September – Desember 2022.
- [3] A. Aulia Latiful *et al.*, "Analisis Tingkat Literasi Keuangan Dan Pengelolaan Keuangan UMKM Pada UMKM Di Kota Mataram", *Jurnal Risma*, Vol. 1 No.4, Desember 2021.
- [4] M. Hisbiyah *et al.*, "Pengaruh Kompetensi Sumber Daya Manusia, Literasi Keuangan, Modal Keuangan, Dan Modal Sosial Terhadap Kinerja UMKM", *Jurnal Ekonomi dan Bisnis*, Vol. 11 No. 1, Juli 2022.
- [5] A. Baiq Fitri, "The Effect Income And Financial Behavior On Financial Literacy With Investment Decisions As Intervening", *Jurnal Akuntansi*, Vol. 10 No.1, Februari 2020.
- [6] S. Eka *et al.*, "Pengaruh Literasi Keuangan Terhadap Keputusan Struktur Modal UMKM Dengan Inklusi Keuangan Sebagai Pemoderasi (Studi Pada UMKM Kluster Mebel Dan Furnitur Kota Semarang)", *Majalah Ilmiah Solusi*, Vol. 18 No. 02, 02 April 2020.
- [7] S. Dewi Tinjung, "Pengaruh *Financial Literacy* Terhadap Aspek Permodalan Pada UMKM "Batik Dewi Ratih" Sragen". *Prosiding Seminar Pendidikan Ekonomi dan Bisnis*, Vol. 3 No. 1, 2017.

- [8] R. Wahyu *et al.*, "Pengaruh Literasi Keuangan Terhadap Pengelolaan Keuangan UMKM", *Jurnal Manajemen Dan Bisnis (Almana)*, Vol. 2 No. 3, Desember 2018

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