

MICRO AND SMALL ENTERPRISES FINANCING MODEL THROUGH THE REVOLVING FUND MANAGEMENT INSTITUTION IN INDONESIA: AHP APPROACH

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Abstract :

The government established a Revolving Fund Management Institution (LPDB) which aims to help capitalize MSMEs by providing loan and financing assistance as needed. This study attempts to analyze effective MSME financing strategies to improve LPDB's performance using the *Analytic Hierarchy Process* approach. The results show that from the perspective of goals development, an increase in the workforce is considered more priority than a reduction in poverty and inequality. Meanwhile, from the perspective of the criteria for developing LPDB in Indonesia, the success of utilization is the priority compared to other criteria. From an alternative side, the form of a cooperative or Islamic cooperative is preferred over other forms.

Keywords: LPDB Sharia, Small medium enterprises, Analytic Hierarchy Process

INTRODUCTION

The business sector in middle and small micro sectors is a sector that has high adaptability to economic conditions and able to withstand the competition of large businesses (Sunarso, 2007). This can be seen based on the Central Statistics Agency's data which shows that, after economic crisis on 1997-1998, the number of MSMEs did not decrease, it even increased steadily, even able to absorb 85 million to 107 million workers.

Micro, Small and Medium Enterprises themselves are productive businesses owned by individuals or Business Entities that have entered the criteria of Micro Business. In Indonesia, the existence of MSMEs has a significant role in the National Economy. In 2015, Central Bank of Indonesia released a profile report on MSMEs which explained that MSMEs had a labor absorption rate of around 97 percent of all national workers and had a contribution to GDP of around 57 percent.

The phenomenon of the stable condition of Micro and Small and Medium Enterprises during the crisis period and its contribution to the Indonesian economy has become an attraction for the parties,

especially the government, to provide a greater portion of assistance to continue to help and develop these MSME entrepreneurs. The other thing is also because the most dominant problem in the development of MSMEs is the lack of capital for entrepreneurs.

Therefore, as a form of the government's seriousness in helping MSMEs, the government issued a Decree of the Minister of Cooperatives and SMEs, No 34 / Kep / M.KUKM / VI / 2004, dated 10 June 2004, concerning the Compilation Team of the Joint Minister of Finance and the Minister of Cooperatives and UKM about the Arrangement of the Management of Rolling Funds for Cooperative and Micro and Small Business Empowerment. Based on the regulations of this ministry, the government established a Revolving Fund Management Institution that aims to assist the capital of MSMEs by providing loans and financing assistance in accordance with the needs of MSMEs.

The establishment of the Revolving Fund Management Agency by the Ministry of Cooperatives as a legitimate and official Government institution in helping MSMEs is undeniable also still has some obstacles and challenges in practice. In principle, LPDB is a government work unit that does not only seek profits and does not have competitors in conducting services to MSMEs. However, it needs to be anticipated regarding the Bank's and Non-Bank Financial Institution, which currently serves microcredit or retail businesses, which are also targets of LPDB-KUMKM. In addition, the low return on revolving funds due to economic factors such as low purchasing power is still a challenge for LPDB.

Based on these problems, researchers tried to analyze the micro, small and medium business financing strategies that were effective to improve the performance of the Revolving Fund Management Institution using the approach *Analytic Hierarchy Process*.

LITERATURE REVIEW

The cooperative revolving fund management institution and micro, small and medium enterprises (LPDB-KUKM) is a work unit formed by the Ministry of Cooperatives and SMEs which implements the Public Service Agency (BLU) financial management system, which functions:

1. Implementation of collection return of revolving funds originating from revolving fund program loans from KUKM, budget funds from the state expenditure budget and other legitimate funding sources
2. Implementation of lending and or financing to Cooperatives and Micro, Small and Medium Enterprises (KUMKM)
3. Implementation of monitoring and evaluation of the implementation of fund management rolling KUMKM
4. Assessment and development of management of revolving funds KUMKM
5. Meaning of treasury, financial accounting, and general administration
6. Implementation of pemekrisan inter LPDB-KUMKM and
7. Implementation of other tasks given by the minister of Cooperatives and Small and Medium Enterprises.

In its operational activities, LPDB KUMKM serves KUMKM by managing revolving funds for KUMKM financing, which include loans and other forms of financing that are suitable for KUMKM needs.

According to the Financial Services Authority, understanding Microfinance institutions is a financial institution specifically established to provide business development and community empowerment services, either through loans or financing in micro-scale businesses to members and communities, deposit managers and the provision of business development consulting services who are not solely seeking profit. Whereas according to Arsyad, Microfinance Institutions are institutions that provide financial services for microentrepreneurs and low-income communities, both formal, semi-formal and informal who are not served by formal financial institutions and have been market-oriented for business purposes.

The Microfinance Institutions Sharia is the financial body whose main activities raise public funds in the form of savings (savings) as well as deposits and channel them back to the community in the form of financing based on Islamic principles through mechanisms that are prevalent in the world of banking

So it could be explained that conceptually, LKMS is an institution which includes two types of activities at once namely (1) activities to collect funds from various sources such as zakat, infaq and shodaqoh and others that are distributed or channeled to those who are entitled to overcome poverty and 2) productive activities in the framework of new value-added and encourage human resource economic growth.

In fact at present, Islamic financial institutions, in general are experiencing developments, both at home and abroad. In fact, research conducted by Nurfalah et al (2018) states that Islamic banking is relatively more stable compared to conventional banking in the face of shock. This is also agreed by Rusydiana (2008) and is an interesting finding that needs to be proven through various researches in the future.

Other Research studies related to MSME analysis were also examined by Abdul Aziz and Eko Wicaksono, 2016 concerning Analysis of Alternative Credit Program Schemes for Micro, Small and Medium Enterprises. The results of this study explain that the scheme and the role of institutions that provide credit programs are one solution to increase access to capital for people with economic limitations. MFIs are considered to minimize risk due to basic problems, namely *adverse selection*, and *moral hazard*. MFIs that are specified in the form of cooperatives have good access to information for prospective debtors who are members of cooperatives. In this scheme, there are also supervised from supervisory institutions such as LPDB, so that this can minimize risk from fundamental problems, namely *moral hazard*, and *adverse selection*.

Whereas in the study by Adi Trisnojuwono et al., 2017 with the title Analysis of Financing Strategies for Micro and Small Businesses Through Revolving Funds in the Institute for Managing Revolving Funds. Based on logistic regression analysis and AHP explained that the factors that influence the performance of revolving funds are the pattern of loans or financing (conventional and sharia patterns), the loan platform and the length of time the business is established. The proposed strategy can be considered in improving the performance of LPDB-KUMKM by taking into account the increase in the effectiveness of loan or financing distribution which includes a loan or financing channels and factors that have a significant effect on successful returns.

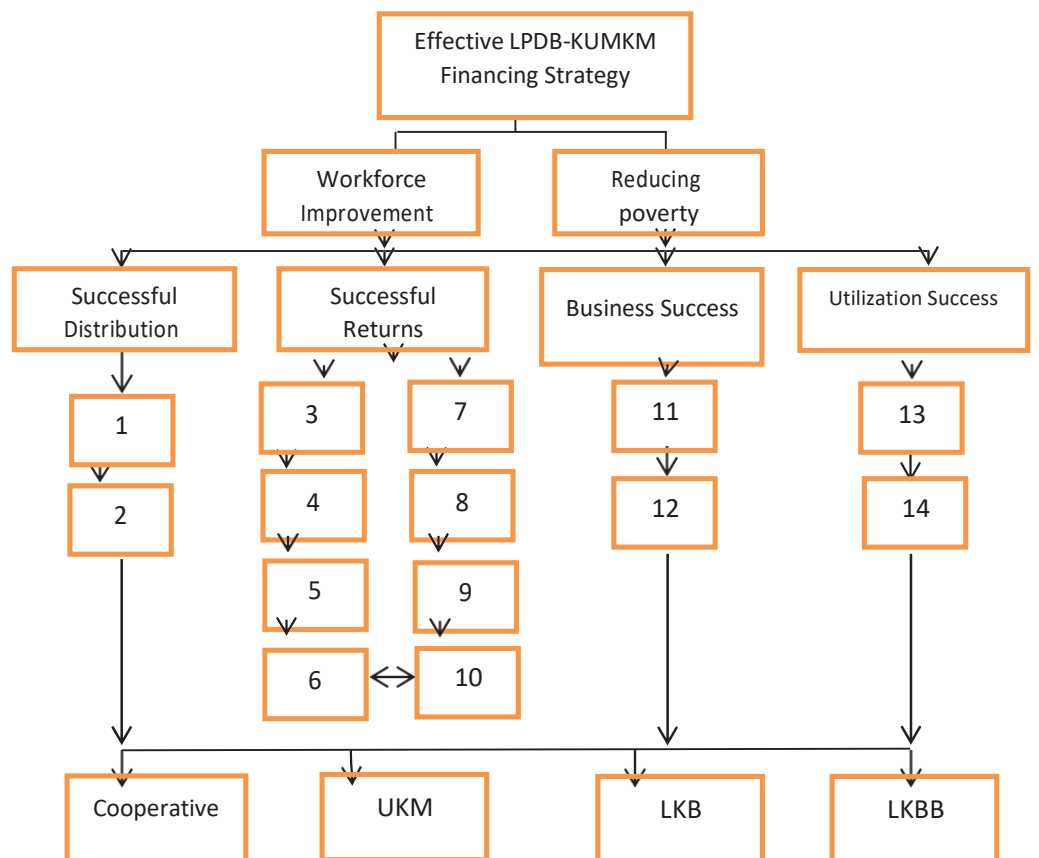
Munizu, Musran, 2013, Performance Improvement Strategies and the Role of Small and Medium Enterprises (UKM) Food-Based Product Processing in Makassar City, This study

aims to identify external and internal factors that determine the performance of small and medium enterprises (SMEs) processing products food-based, knowing its role in providing food-based products for the community, and formulating strategies to improve the performance of SMEs processing food-based products in Makassar City using Descriptive Analysis and Analytical Hierarchy Process.

The results show that important factors and priorities that determine the performance of SMEs are market availability, length of business, quality control, business management, and sales promotion as internal factors, and access to capital, access to market information, pro-business government policies, loan interest rates and technical guidance as external factors. The role of SMEs in providing food-based products for the community is included in the good category.

Rusydiana, Aam and Abrista Devi, 2013, Solve the problems and solutions to the development of Sharia Microfinance Institutions in the ANP BOCR approach, This study attempts to identify the causes and dominant factors that become obstacles in the development of LKMS in Indonesia, with the BOCRmethod approach *Analytic network process (ANP)*, including the proposed strategic solution, the Research Results are based order of priority, the alternative aspects show that the technical aspects are a priority aspect, followed by legal / structure, market / communal, and HR aspects. Decomposition of the solution as a whole produces a sequence of priorities 1) Coaching/socialization/ mentoring of the community is a top priority, followed by 2) product innovation, 3) strategic location, 4) cooperation with other LKS and 5) making external elements as information centers and media socialization.

While the priority of strategies that are considered to increase the development of LKMS in Indonesia consists of 1) optimizing the role of the government in funding, 2) coordinating with PINBUK, and 3) linkage program LKMS-BMT-BPRS-BUS.



- Information:
1. Momentum of distribution time
 2. Distribution techniques
 3. Return period
 4. The rate of remuneration that is a burden on partners
 5. Partner compliance with principal development
 6. Partner compliance with interest payments / profit sharing
 7. Loan / financing scheme (conventional / sharia)
 8. Amount of loans / financing given to UKM, LKB, Cooperatives and LKBB
 9. the duration of the business
 10. Availability of loan / financing schemes (conventional / sharia)
 11. Growth of turnover
 12. Absorption of labor
 13. Conformity with allotments based on realization reports
 14. Level of business profitability

Picture 1. Structure of AHP decomposition

RESEARCH METHODOLOGY

In this research, data which were used from indepth interviewresult with expert and practition which have understanding about problems which were discussed. There was continued by filling questionairre in the second meeting with respondent. Generally, requirement of valid respondent in AHP is about experts who have have become expert in their own field. Data used in this study were the indepth interview with 9 expert on microfinance. The selection of respondent is based on the random sampling. The respondent selection in the AHP research was conducted by concerning respondent understandidng about problems which were observed..

The researcher prepared interviewed questions following the using condition of AHP tool. This table showed the example of AHP interview which the researcher used based on the researcher aim which was prioritizing development of microfinance and SMEs in Indonesia.

Table 3.1. AHP Questionnaire

	Education	Health	Mosque	Social	Trade	Environment	Infrastructure
Education							
Health							
Mosque							
Social							
Trade							
Environment							
Infrastructure							

The number of consistency of overall paired comparison was determined from Consistency Index (CI), $CI = (\max-n) / (n-1)$ where n is the matrix unit. The consistency scored can be checked by looking at the Consistency Ratio (CR) score under. In AHP, this is important because the high inconsistency level indicated that the respondents did not understand about different options. Ratio score is also important because it showed the robust estimation result in AHP (Lipovetsky & Conklin, 2002). This is the table of average random consistency index.

Table 3.2. The Average Random Consistency Index (RI)

MATRIX UNITS	1	2	3	4	5	6	7	8	9	10
RANDOM CONSISTENCY	0	0	0.58	0.9	1.12	1.24	1.32	1.41	1.45	1.49

This research was also the research of quantitative-qualitative analysis which aimed to find the score or the view which was represented by the respondent based on the preference of SMEs development sector. The analysis used was AHP method and it was processed by using Expert Choicesoftware.

RESULTS AND DISCUSSION

Phase 1 is model construction or decomposition to identify, analyze and structure the complexity of the problem into the appropriate AHP network, which includes: a) literature review, questionnaire and independent interviews with microfinance experts and practitioners to understand the problem; b) build AHP networks based on the above understanding; c) validation of AHP networks designed to experts and practitioners.

Phase 2 is the quantification of the model using pair-wise comparison, which includes: a) designing pair-wise questionnaires that correspond to AHP networks designed in phase 1; b) test the pair-wise questionnaire to prospective expert respondents and practitioners; and c) surveys to expert respondents and practitioners to guide them to complete the pair-wise questionnaire and maintain consistency.

Phase 3 is synthesis and analysis of results, which include: a) processing data obtained in phase 2 with AHP (super decisions) software, synthesizing and obtaining the results, and calculating geometric mean and rater agreement¹; b) validation of the results obtained; and c) interpret results, analyze results, and provide policy recommendations.

In practice, the use of the AHP method in research is very varied in various fields, as stated by Sipahi & Timor (2010), Lee (2010) and Ho (2008). Meanwhile, in the Islamic finance economy, research with the ANP method has been carried out by Rusydiana (2016), Rusydiana and Devi (2013), Ascarya (2015), Rusydiana and Devi (2018), and other studies.

Model Analysis

At this stage, the researcher conducts literature studies on all aspects that are the objectives and criteria for LPDB development in Indonesia. In addition, in-also conducted *depth interviews* were to several respondents who were considered to be most aware of the problems being studied. As well as prioritizing searches are also done through filling out questionnaires so that with these three methods the authors can find aspects that will be the priority criteria, sub-criteria and alternative strategies for developing LPDB in Indonesia. Next, a model was made to be analyzed using the software. More specifically, this study follows the model used by Trisnojuwono et.al (2017).

Table. 4.1. Priority results of criteria, sub-criteria, and alternatives

	ELEMENT	EIGENVALUE	RANK
OBJECTIVE			
T1	Labor increase	0.563	1
T2	The decrease in poverty & inequality	0.437	2
CRITERIA			
K1	Distribution	0.141	4
K2	Returns	0.263	2
K3	Business increase	0.249	3
K4	Utilization	0.347	1
SUBKRITERIA			
SK1	The momentum of distribution time	0.603	1
SK2	Distribution Technique	0.397	2
SK3	Return period	0.262	1
SK4	The rate of remuneration for partner expenses	0.134	4
SK5	Compliance partner for the principal return	0.180	3
SK6	Compliance partner for profit sharing/interest	0.186	2
SK7	Loan scheme (conventional / sharia)	0.110	6
SK8	The loan amount is given	0.127	5
SK9	Growth turnover	0.457	2
SK10	Absorption of labor	0.543	1
SK11	Compliance with designation	0.654	1
SK12	RentabilityLevel	0.346	2
ALTERNATIVE			
A1	LKBB	0.262	2
A2	LKB	0.141	4
A3	Cooperative (sharia)	0.374	1
A4	UKM	0.223	3

¹ To find out the way geometric mean and rater agreement or Kendall's coefficient calculation can refer to the Ascarya paper (2011).

From the perspective of goals development, an increase in the workforce (0.563) is considered more priority than menu run of poverty and inequality (0.437). Meanwhile, from the perspective of the criteria for developing LPDB in Indonesia, successful utilization (0.347) is the priority compared to other criteria. Next is the success of returns (0.263), increase in business (0.249) and success of distribution (0.141). On the alternative side, the form of a cooperative or sharia cooperative (0.374) is preferred over other forms such as LKBB (0.262), UKM (0.223) and LKB (0.141).

Meanwhile, in terms of sub-criteria for LPDB development within the framework of supporting SMEs in Indonesia, the priority of choice is the momentum of distribution time (distribution criteria), the repayment period (return criteria), employment (criteria for business improvement) and suitability (utilization criteria).

CONCLUSIONS AND RECOMMENDATIONS

This study attempts to analyze effective micro, small and medium business financing strategies to improve the performance of Revolving Fund Management Institutions using Analytic Hierarchy Process approach. The results show that from the perspective of goals development, an increase in the workforce is considered more priority than a reduction in poverty and inequality. Meanwhile, from the perspective of the criteria for developing LPDB in Indonesia, the success of utilization is the priority compared to other criteria. From an alternative side, the form of a cooperative or Islamic cooperative is preferred over other forms.

More structured efforts are needed both in terms of distribution (distribution), the return scheme as well as a system of monitoring and evaluating the provision of funding to partners so that the effectiveness of revolving fund loans can be used more evenly and comprehensively.

REFERENCES

- Arsyad, Lincolin, (2008), *Microfinance Institutions: Institutions, Performance, and Sustainability*, Andi Publishers, Yogyakarta.
- Bank Indonesia, (2015), *Profile of Micro, Small and Medium Enterprises*, Jakarta, downloaded at <https://www.bi.go.id/id/umkm/peneliti/nasional/kajian/Documents/Profil%20Bisnis%20UMKM.pdf> on November 9, 2018
- Ho, W. (2008), "Integrated analytic hierarchy process and its applications: A literature review", *European Journal of Operational Research*, Vol. 186, pp. 211-228.
- Ilmi, Makhaul, SM, (2002), *Theory and Practice of Islamic Microfinance Institutions*. Yogyakarta: UII, Press.
- Lee, MC (2010), "The analytic hierarchy and the network process in multicriteria decision making: Performance evaluation and key performance indicators based on ANP models", *Convergence and Hybrid Information Technologies*, Book edited by Marius Crisan.
- Lipovetsky, S. and Conklin, W.M. (2002), "Robust estimation of priorities in the AHP", *European Journal of Operational Research* Vol. 137, pp. 110-122.

- LPDB. The Budget Plan for LPDB-KUMKM 2018, downloaded at <http://lpdb.id/RBA%20LPDB%202018.pdf> on November 9, 2018
- Munizu, Musran, (2013) Performance Improvement Strategies and Roles of small and Processors of Medium Enterprises (SMEs) Food-based products in Makassar City, Ubaya Journal. The University of Hasanudin Repository.
- Nurfalah, I., Rusydiana, USA, Laila, N., and Cahyono, EF (2018), “Early warning to banking crises in the dual financial system in Indonesia: The Markov switching approach”, *JKAU: Islamic Economics*, Vol. 31, No.2, pp.133-156.
- Rusydiana, Aam S, (2008). “Determinants of Indonesian inflation: A comparison of Islamic and conventional approaches”, Thesis on Islamic Economics Studies Program STEI Tazkia Bogor.
- Rusydiana, Aam Slamet (2016). “Analysis of the problem of developing Islamic banking in Indonesia: Application of Analytical network process methods”, *Essence: Journal of Business and Management*, Vol.6, No.2, pp.237-246.
- Rusydiana, Aam S, and Abrista Devi, (2018). “Elaborating cash flow development in Indonesia using analytic network process”. *International Journal of Islamic Business and Economics*, Vol. 2 No. 1, pp. 13-13.
- Rusydiana, Aam Slamet, and Devi, A. (2013). “Challenges in Developing Baitul Maal wat Tamwiil (BMT) in Indonesia using Analytic Network Process (ANP)”. *Business and Management Quarterly Review* 4 (2) 51-62.
- Sipahi, S. and Timor, M. (2010), “The analytic hierarchy process and analytic network process: An overview of applications”, *Management Decision*, Vol. 48, Issue 5, pp. 775-808.
- Sunarono, (2007), Micro, Small and Medium Enterprises as Indonesian Economic Dynamics and Stabilizers, *Journal of Economics and Entrepreneurship*, Vol. 7 No. 1 April 2007.
- Trisnojuwono, A., Hubeis, AVS, and Cahyadi, ER (2017). “Analysis of micro and small business financing strategies through revolving funds in revolving fund management institutions”, *IKM Management*, Vol.12, No.2, pp.178-186.