

Sustainability Analysis of the Revolving Fund Program of the LPDB (Revolving Fund Management Institution): MICMAC Method Approach



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ABSTRACT

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The importance of access to credit for micro, small, and household craft enterprises, including cooperatives, has become a major focus in improving working capital financing and capital accumulation to support industrial income. The government through the LPDB (Revolving Fund Management Institution) has launched a revolving fund program that aims to strengthen the capital base of cooperatives, increase the capacity of human resources in business and financial management, and increase the role of cooperatives in expanding employment opportunities and reducing poverty. According to data from the Cooperative Business Development Division of the Denpasar City MSME Cooperative Office, from 2021 to 2023, there were five cooperatives that received the LPDB revolving fund program, but did not consistently reapply for the funds. This raises concerns regarding the sustainability of the program and the factors that influence it. This study aims to identify the factors that influence the sustainability of the LPDB program for cooperatives in Denpasar City. Using the MICMAC (Matrix of Cross Impact Multiplications Applied to a Classification) analysis method, this study reveals that the revolving fund administration requirements and members' information and knowledge about the revolving fund have the most significant direct influence. These findings underscore the importance of simplifying the administrative process and improving member knowledge to ensure the success of the program. In addition, active member participation emerged as an important predictor of program sustainability, highlighting the importance of members' direct involvement in supporting their economic activities. Thus using this method can uncover critical factors, and provide a comprehensive understanding that can inform policy adjustments and strategic implementation to improve program sustainability.

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1. Introduction

The development of industrial businesses cannot be separated from the important role of capital in a business to be built. Businesses not only need their own capital but can also get loan capital, which will affect the increase in business income and productivity (Nuriasih & Yuliarmi, 2020). Capital will help micro and small economic entrepreneurs increase their production value and investment value. For micro, small and household handicraft businesses, credit is considered quite important to increase the need for working capital financing to run a business and increase the accumulation of capital fertilization, towards industrial business income. According to (Riana, Wiagustini, & Meydianawathi, 2014) capital loans or capital assistance have an effect on improving the community's economy.

Denpasar City, as the capital of Bali Province, has a very important role in driving the economic sector. Based on data from the Central Bureau of Statistics of Bali Province in 2023, the GRDP of Denpasar City (Billion Rupiah) reached 60,100.30, showing significant economic growth in various sectors, especially the financial sector. Denpasar City, as the main financial center on the island of Bali, plays an important role in supporting regional economic growth. With a strong contribution from the financial sector, Denpasar City continues to be a vital center of economic and trade activity, providing employment opportunities and improving the welfare of its residents.

Cooperatives not only operate as business entities, but also act as development agents to reduce poverty, improve community welfare, and spread the cooperative spirit for the growth of private and state enterprises (Wahyu & Aswitari, 2022). The contribution of cooperatives to the Gross Regional Domestic Product (GRDP) in Denpasar City can be seen in several sectors according to the type of business run by the cooperative, for example in the category of financial services and insurance contributed by the type of savings and loan cooperative. Then cooperatives as organizations in the community that help with problems in the financial sector were also affected during the Covid-19 pandemic, so that the continuity of cooperative activities at that time was quite turbulent, including in terms of financing. The following is data on the development of cooperatives in Denpasar City in 2019-2023.

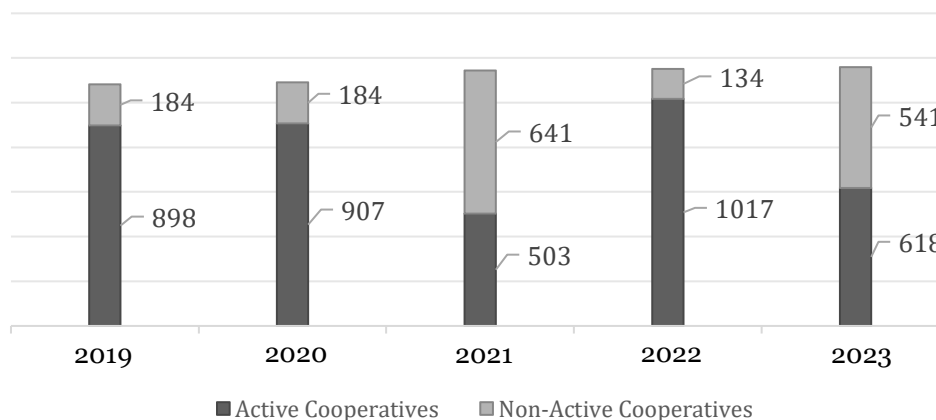


Figure 1 Development of the Number of Cooperatives in Denpasar City in 2019-2023
Source: Dinas Koperasi UMKM Kota Denpasar (2023)

The government channels the Revolving Fund program for cooperative Revolving Fund Management institutions, micro, small, and medium enterprises, and cooperatives to help them overcome the capital limitations and challenges they face (LPDB-KUMKM). Revolving Funds are funds sourced from the National Budget (APBN) that are loaned to cooperatives, micro-enterprises, small businesses, and medium-sized businesses as part of the role of local

government facilities in developing cooperatives, micro-enterprises, small businesses, and medium-sized businesses, to be paid back to the local government within a predetermined time. The purpose of this Revolving Fund is to empower micro enterprises through strengthening the capital of KSP/USP-Cooperatives; improve the ability of human resources in the field of business management and financial management; and strengthen the role and position of KSP/USP-Cooperatives in supporting efforts to expand employment opportunities and alleviate poverty (Kemenkopukm, 2021).

Based on data from the Cooperative Business Development Division of the Denpasar City UMKM Cooperative Office, which is responsible for the implementation and assistance of Revolving Funds for Revolving Fund management institutions (LPDB), from 2021 to 2023 there are 5 cooperatives, the following data on cooperatives receiving the LPDB Revolving Fund program in Denpasar City.

Table 1. Data of Cooperatives Receiving LPDB Revolving Fund Program in Denpasar City

No.	Cooperative Name	Year of Obtaining LPDB Revolving Fund
1.	KSU Nawa Eka Cita	2021
2.	KSU Kertasari Sedana	2021
3.	KSP Dharmasiaga	2022 and 2023
4.	KSU Transportasi Sewaka Dana	2022 and 2023
5.	Koperasi Konsumen Central Utama Mandiri	2023
Total Cooperatives		5

Source: Dinas Koperasi UMKM Kota Denpasar (2023)

It is very important to evaluate the government on the capital problems that continue to be faced by cooperatives and the quantity of Revolving Fund recipients from the Revolving Fund Management Agency (LPDB) regarding the sustainability of this program, especially in terms of advancing the growth and development of cooperatives in Denpasar City. The participation of the number of recipient cooperatives in the LPDB Revolving Fund program is considered important in helping capital problems for cooperative administrators who do not have assets as collateral, as well as increasing the production value and investment value of small industries to continue running their businesses. Based on these problems, this study was conducted to analyze the factors that determine the sustainability of the Revolving Fund program of the Revolving Fund management institution (LPDB), then map and analyze the factors associated with the sustainability of the LPDB Revolving Fund program for cooperatives in Denpasar City.

2. Literature Review

Public Policy Theory

Public policy, as defined by the Kamus Besar Bahasa Indonesia (KBBI), encompasses a series of concepts and principles that serve as the foundation for plans in the execution of work, leadership, and actions. Heinz Eulau and Kenneth Prewitt (Soenarko, 2003) characterize policy as a firm decision characterized by stability or consistency in behavior and the repetition of actions, both by those who make it and those who must adhere to it. According to Thomas R. Dye (in Soenarko, 2003), public policy is described as "what ever governments choose to do or not to do," emphasizing that public policy represents the government's discretion in determining actions to be taken or avoided. Carl J. Friedrich further elaborates that government policy entails a course of action proposed to individuals, groups, or the government within a given environment, with its obstacles and opportunities, aimed at achieving a specific goal or fulfilling a particular desire (in Soenarko, 2003).

Easton (Tangkilisan, 2003) defines public policy as the allocation of power values for the entire society, with the government being the sole entity capable of taking action on behalf of society. Anderson (Tangkilisan, 2003) classifies public policy as substantive policy, which outlines actions to be taken by the government, and procedural policy, which specifies who and how the policy is implemented. The implications of public policy are as follows: 1) Public policy always has specific objectives or goal-oriented actions; 2) It entails actions by the government; 3) It encompasses actual actions taken by the government, not merely intended actions; 4) Government policy decisions may be either positive actions addressing specific issues or negative decisions to refrain from action; 5) Government policies are, at the very least, based on binding and coercive legislation.

Woll (Tangkilisan, 2003) views public policy as a set of government activities aimed at addressing societal issues, either directly or through various institutions influencing community life. In the implementation of public policy, there are three levels of influence and government actions: 1) Policy choices or decisions made by politicians, government officials, or others aiming to use public power to influence community life; 2) Policy outputs, where policies implemented at this level require the government to regulate, budget, staff, and establish regulations in the form of programs that will impact community life; 3) Policy impacts, representing the effects of policy choices that influence community life.

Based on scholars' perspectives on public policy, it can be concluded that public policy entails actions guided by concepts and objectives aimed at solving issues defined by government officials and bodies. According to (Pramudya, Hospes, & Termeer, 2017), the public objective is the achievement of societal welfare through policy products created by the government. The Revolving Fund LPDB (Lembaga Pengelola Revolving Fund) program is one such public policy, characterized by concepts and objectives aimed at addressing issues set by government officials and bodies. This research will explore the impact of the Revolving Fund LPDB program on cooperatives and the resulting effects of this program.

Cooperative Concept

General understanding and Law No. 25 of 1992 on cooperatives are two definitions of cooperatives. In general, a cooperative is a group of individuals or organizations that, by their familial cooperation, allow members to come and go freely. As defined by the law, a cooperative is a people's economic movement based on family values and a commercial organization comprised of people or cooperative legal entities with its activities based on cooperative principles (Soenarko, 2003; Undang-Undang Nomor 25 Tahun 1992).

Cooperatives have their own characteristics, such as voluntary membership, democratic management, fair distribution of residual income, and independence in their economic activities. Cooperative membership is voluntary and open, with democratic management and fair distribution of the remaining proceeds to its members (Soenarko, 2003; Undang-Undang Nomor 25 Tahun 1992). In addition, cooperatives also emphasize their independence in their economic activities (Soenarko, 2003; Undang-Undang Nomor 25 Tahun 1992). The objectives of cooperatives include advancing the welfare of members and the community, and participating in building the national economic order. Cooperatives play an active role in improving the economic and social welfare of members and strengthening the people's economy as the basis for the strength of the national economy (Soenarko, 2003; Undang-Undang Nomor 25 Tahun 1992).

The principles of cooperative management regulate the relationship between cooperatives and their members, the pattern of management, the objectives to be achieved, as well as the pattern of capital ownership and the distribution of the remaining proceeds. These

principles include voluntary membership, democratic management, and fair distribution of the remaining proceeds (Soenarko, 2003; Undang-Undang Nomor 25 Tahun 1992). Cooperatives can be divided into several types based on the field of business, such as savings and loan cooperatives, consumer cooperatives, marketing cooperatives, and producer cooperatives. These types of cooperatives differ in their membership and business fields, but are still based on the same cooperative principles (Rudianto, 2010).

Cooperative equity consists of members' capital, donated capital, reserves, and remaining operating results. Member capital includes principal savings, mandatory savings, and voluntary savings, while donated capital is a contribution from other parties that is grant-based and non-binding (Rudianto, 2010). The cooperative's organizational structure consists of administrators and supervisors. The board is in charge of managing the cooperative and its business, while the supervisor is responsible for supervising the policies and management of the cooperative (Undang-Undang Nomor 25 Tahun 1992). The position of the management and supervisors is stipulated in the cooperative's articles of association (Undang-Undang Nomor 25 Tahun 1992). Cooperative members have a position as owners and users of cooperative services. Cooperative membership is non-transferable and members play an active role in cooperative activities (Law No. 25 of 1992). The management and supervisors of cooperatives act on behalf of the cooperative legal entity, and their legal status depends on the legal system of the country concerned (Soenarko, 2003; Undang-Undang No. 25 Tahun 1992).

Revolving Fund Concept

Revolving Funds are funds sourced from the National Budget (APBN) that are loaned to cooperatives, micro-enterprises, small businesses, and medium-sized businesses as part of the role of local government facilities in developing cooperatives, micro-enterprises, small businesses, and medium-sized businesses, to be paid back to the local government within a predetermined time. Revolving funds are derived from the state budget in addition to the income from the actual revolving loans which income is channeled back to the community. Funds earmarked by State Ministries/Institutions/Public Service Agency Work Units for business capital strengthening activities for cooperatives, micro, small, and medium enterprises, and other companies operating under the direction of the State Ministries/Institutions are also referred to as revolving funds. According to Sidik in (Utami, 2019). Revolving Fund are a form of government investment in the economic sector in order to improve justice.

Revolving funds are characterized by being given to the community or community groups, billed back with or without added value, and then rolled back to the community or community groups. (Widayati & Susanto, 2023). The policy of providing Revolving Fund is also one of the alternatives designed by the government to reduce poverty and empower communities through economic activities by providing credit loans for micro, small, medium, and cooperative businesses (Anggraeny, 2021). Providing loans or financing to cooperative and MSME actors, either directly or through intermediaries, is a manifestation of the implementation of the functions and roles of the Cooperation Revolving Fund Management Institution and Micro, Small and Medium Enterprises (LPDB-KUMKM) as an instrument of government policy in the field of financing to cooperatives and MSMEs, increasing access to financing for cooperatives and MSMEs, and in order to increase the business and competitiveness of the products to be produced (Trisnojuwono, Hubeis, & Cahyadi, 2017).

The Revolving Fund policy is a policy issued by the local government as an assistance program provided by the government in the form of revolving credit to MSME actors and cooperatives in the context of strengthening capital in order to increase the business potential

of productive communities. The funds are channeled through a rolling pattern whose procedures and requirements are regulated in the Decree of the Minister of Cooperative and UKM (KUKM) and this method is used to utilize assistance to KUKM. This revolving pattern began in 2000 and is one of the breakthroughs of the Ministry of KUKM to assist KUKM in order to stimulate the economic growth of the community through the policy of fostering and developing KUKM programs. The policy of providing Revolving Fund developed by the Ministry of KUKM to date comes from 2 (two) sources, namely compensation for fuel oil subsidies and the State Budget (APBN) which is then passed down to local governments. In general, the purpose of the policy of providing Revolving Funds to MSMEs is to increase economic activity, increase the volume of cooperative and SME businesses, increase employment, increase the spirit of cooperation, improve management performance, and generate work ethic (Ariyudha, 2018).

3. Research Method

This research will be carried out in 6 (six) months to cooperatives receiving the Revolving Fund program (LPDB), which begins by identifying program characteristics, characteristics of the interests of relevant stakeholders, and important variables considered for program sustainability. The approach in this research is a quantitative approach with a descriptive correlational research type (Harahap, 2017).

Research on the sustainability of the LPDB Revolving Fund program often experiences obstacles due to inaccurate information (Mustafa & Rahim, 2019). So, this research will use the Focus Group Discussion (FGD) method involving experts, the government through related agencies, the Regional Indonesian Cooperative Council (DEKOPINDA) of Denpasar City, representatives of cooperative administrators who received the LPDB Revolving Fund program, and representatives of cooperative administrators who did not receive/apply for the LPDB Revolving Fund program as valid information, a total of 112 people. FGDs were used to collect data on the problem's state, pinpoint the variables influencing sustainability, and offer useful inputs for data analysis using sustainability analysis.

A structural analysis method called MICMAC sustainability analysis is used in this study to identify key system factors (Fauzi, et al., 2020). According to Fauzi (2019) the stages of the MICMAC analysis are based on two main stages. The first stage is to understand the scope of the problem and the system to be studied. The next stage is to analyze the intensity of influence and dependence between variables determined by the location of the variables on the quadrant map as shown in the figure.

	V 1	V 2	V 3 ...	V n	Influence (Y-Axis)
V 1	0	(V1,V2)	(V1,V3) ...	(V1,Vn)	$\sum (Var_{i-j})$
V 2	(V2,V1)	0	(V2,V3)	(V2,Vn)	
V 3	(V3,V1)	(V3,V2)	0	(V3,Vn)	
..					
V n	(Vn,V1)	(Vn,V2)	(Vn,V3)	0	
Dependence (X-Axis)	$\sum (Var_{j-i})$				

Figure 1. Tabulation of the Relationship between Influence and Dependence

Source: Fauzi, 2023

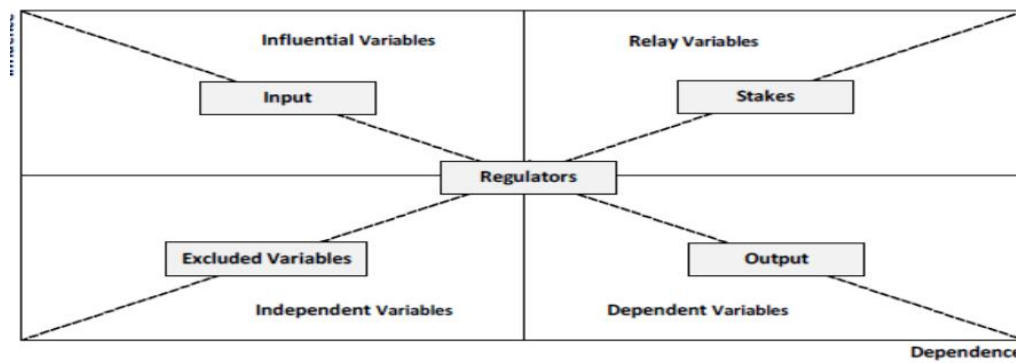


Figure 2. Illustration of MICMAC Analysis Results
 Source: Chatziioannou & Alvarez-Icaza, 2017; Godet, 1994

1. In quadrant I, influence variables-also referred to as “decisive variables” means that they describe variables that are very significant because they can be considered as key factors.
2. Relay variables, or system instability variables, are variables in quadrant II with significant attributes but high dependencies.
3. Although it has minimal impact, the dependent variable in quadrant III is highly dependent on it. Any changes in the influence relays and influence factors will have a noticeable impact on these variables.
4. Exclude variables in quadrant IV or also known as "autonomous variables" because the influence is small and the level of dependence is also small.
5. Additionally, there are regulating factors, or variables that are under your control and often don't require discussion or prioritization (Hsiu, Chiu, & Tieh, 2009).

Table 2. Factors Associated with the Sustainability of the LPDB Revolving Fund Program

No	Label Length	Short Labels	Description	Source
1.	LPDB Regulatory Policy	LRP	Government policies and regulations related to cooperatives, especially those that support the provision of Revolving Funds and business growth.	(Widayati, A., & Susanto, H., 2023)
2.	Member and Community Trust	MCT	A high level of trust from members and the community as a whole in the cooperative can increase participation, support growth, and ensure the sustainability of the Revolving Fund.	(Novita & Purnomo, 2023)
3.	Cooperation with Financial Institutions and Government	CFIG	Good cooperation with financial institutions and government, including securing financial support and supportive policies	(Runtunuwu, Prince H.R. et al, 2023)
4.	Economic and Market Conditions	EMC	Changes in economic and market conditions affect the demand and supply of Revolving Funds. Cooperatives that can adapt quickly can support the sustainability of Revolving Funds.	(Prasetyo & Sari, 2023)
5.	Administration Requirements for Revolving Funds	ARDB	Clear and well-established administrative requirements can improve transparency, accountability, and efficiency in the management of cooperative Revolving Funds.	(Winata & Setiawan, 2023)
6.	Member Information and Knowledge on Revolving Funds	MIKRF	Information and knowledge provided to cooperative members on the benefits and management of Revolving Funds can increase participation and sustainability of the program.	Ramadhan, A., & Wicaksono, A. D. (2022)

7.	Management Administration Governance Capability	MAGC	Cooperative management skills and abilities in preparing administration, planning, organizing, directing, and controlling resources in cooperatives.	(Latifah, S.W. et al, 2021)
8.	Quality of Service and Product Innovation	QSPI	Good service quality increases member and customer satisfaction, which in turn can support the growth and sustainability of Revolving Funds.	(Kusumawati & Putri, 2022)
9.	Risk Management	RM	Cooperatives that have good risk management policies and practices can overcome external and internal challenges, thus supporting the sustainability of Revolving Funds.	(Hardi & Iswadi, 2022)
10.	Cooperative Capital	CC	The availability of sufficient capital is important to ensure the sustainability of cooperative Revolving Funds. Adequate capital supports lending to members and cooperative business development.	(Wibowo & Nurweni, 2022)
11.	Cooperative Member Participation	CMP	The level of active participation of cooperative members in Revolving Fund activities and programs can increase sustainability, as involved members tend to care more about the success of the cooperative.	(Putra & Sudana, 2021)
12.	Use of Information Technology	UIT	The use of information technology in administration, fund management, and member communication can improve the efficiency, accuracy, and sustainability of cooperative Revolving Funds.	(Budiarto, et al, 2023)
13.	Role of Cooperatives in Local Development	RCLD	Cooperatives' contribution to local development through training, employment, and poverty alleviation can increase community and government support.	(Satria & Sutrisno, 2022)
14.	Cooperative's Profit and Loss	SHU	Managing SHU cooperatives by giving some to members as deposits or profit sharing can increase member confidence.	(Setiawan & Arifin, 2023)
15.	Cooperative Business Volume	CBV	A high volume of business indicates good cooperative growth. With this growth, the cooperative can increase lending and support more members.	(Supriyanto & Pramono, 2023)

Source: Own elaboration, 2022

6. Results and Discussion

a. Mapping of Factors Related to the LPDB Revolving Fund Program

Mapping the factors associated with the sustainability of the Revolving Fund program is expected to be a tool to know clearly and easily between one variable and another. Based on the results of the MICMAC analysis, the position of each factor related to the sustainability of the LPDB Revolving Fund program for cooperatives in Denpasar City can be mapped. The figure will be presented in the form of four quadrants, each of which will identify influence variables and dependency variables. In addition, there are regulator variables that are considered as regulators in the program as shown in the following figure.

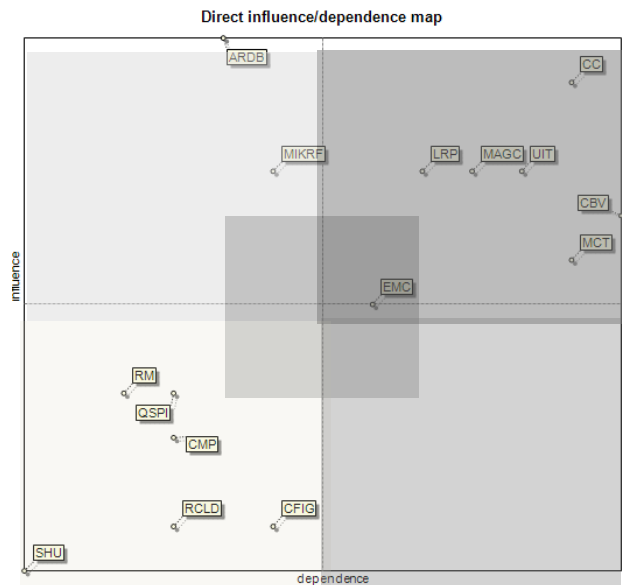


Figure 3 Direct Influence/ Dependence Map
Source: MICMAC Analyst System, 2024

The influence/dependency graph displays the location of each factor or variable based on Figure 3 above. Table 2 below provides a clearer presentation of the categorization and location of each variable.

Table 3. Variable Graph Typology Based on Direct Effect/Dependency

Influence Variables	Relay Variables	Exclude Variables	Regulatory Variables
Revolving Fund Administration Requirements (LPDB)	Cooperative Capital	Service Quality and Product Innovation	Economic and Market Conditions
Member Information and Knowledge about Revolving Fund	Use of Information Technology	Risk Management	
	Management Administration Governance Capability LPDB Regulatory Policy	Member Participation	
	Cooperative Business Volume	The Role of Cooperatives and Local Development Cooperation with Financial Institutions and Government	
	Cooperative Member Trust	Residual Income	

Source: MICMAC Analyst System, 2024

It also offers details on the degree to which each variable influences the others, based on the findings of the MICMAC study. The effect between the factors is shown in Figure 3, specifically: The following lines show different levels of influence: 1) red, which indicates very strong influence from the variable; 2) thick blue, which indicates relatively strong influence; 3) thin blue, which indicates moderate influence; 4) black, which indicates weak influence; and 5) dashed, which indicates very weak influence.

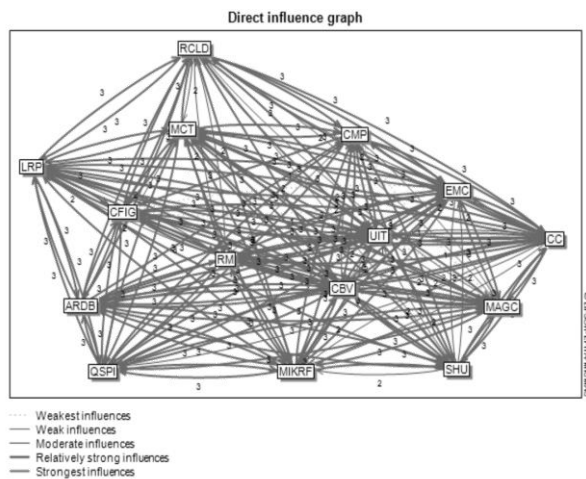


Figure 4 Intensity of Direct Influence Variables

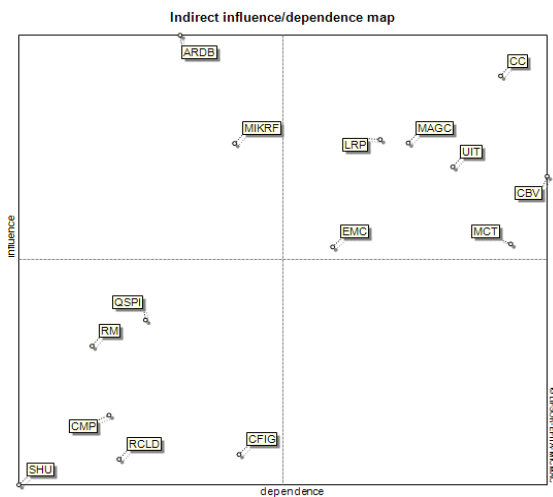


Figure 5 Indirect Influence/ Dependence Map

Source: MICMAC Analyst System, 2024

The basis for making judgments or formulating policies for stakeholders is the interplay of factors. Additionally, it is critical to learn more about the system's stability, specifically the relevant factors, therefore a re-identification based on indirect influence is required. It is evident from a comparison of Figure 5 with Figure 3 that the variables from the direct influence categorization remain in the same positions. It can be shown from this that the direct influence factors that are categorized are constant (Ariyani, Prasetya, & Gilang, 2018). In addition, the MICMAC analysis offers an examination of the potential for direct impact, which explains how actions on the system may alter the way variables are classified. The figure that follows displays.

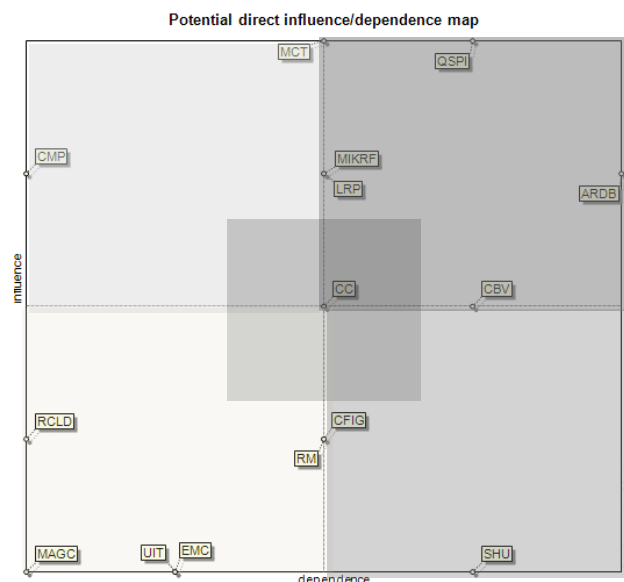


Figure 6. Potential Direct Influence / Dependence Map

Source: MICMAC Analyst System, 2024

From Figure 6, the relationship between the administrative requirements of the LPDB Revolving Fund (ARDB) with information and knowledge of members about the Revolving Fund (MIKRF) is one of the variables that has changed position, namely from quadrant I to quadrant II. Furthermore, from quadrant II to quadrant I by the member participation variable (CMP) and member and community trust (MCT). Furthermore, some variables enter

quadrant III, namely the remaining profit (SHU). Furthermore, the cooperative capital variable (CC) replaced the control variable, then market economic conditions (EMC), which moved to quadrant IV. This modification indicates that any policy changes made to the LPDB Revolving Fund program will affect.

Furthermore, the dependent variable (quadrant III) has a strong dependency based on its properties. In MICMAC analysis, it also analyzes future conditions (forecasting) or referred to as indirect effects and current conditions as direct effects. Iterations produce forecasts, and the fewer iterations required to get 100% results, the better. Only five iterations were performed in this example, and Table 4 below shows the results of these iterations.

Table. 4 Stability Matrix

Iteration	Influence	Dependence
1	97 %	98 %
2	100 %	100 %
3	100 %	100 %
4	100 %	100 %
5	100 %	100 %

Source: MICMAC Analyst System, 2024

Changes in priority levels (influence and dependency variables) result in changes to the current situation and the predicted future situation. This is demonstrated by comparing the list of variables sorted by dependency and influence, which shows how the relative importance of direct and indirect impacts has changed.

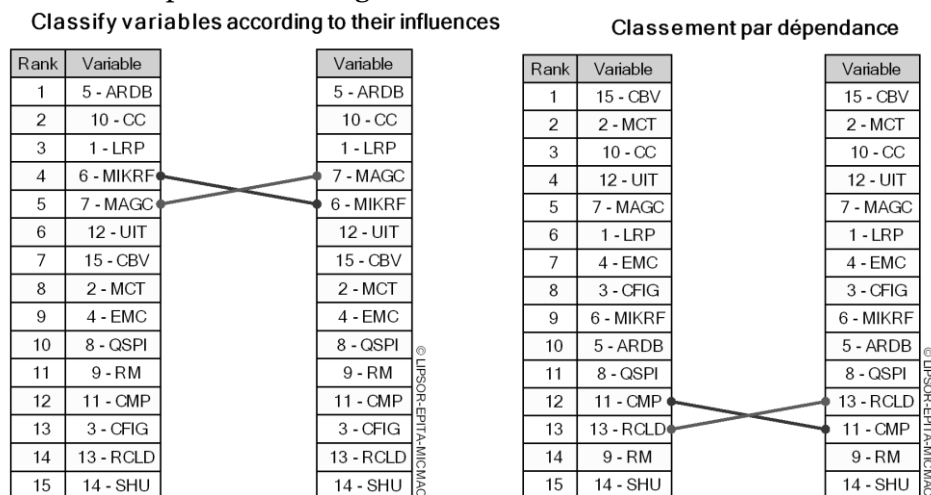


Figure 7. Rank Classification Based on Influence and Dependency

Source: MICMAC Analyst System, 2024

It is critical for a policy review to understand each variable's priority level. The rank percentage, or the most significant order of system/policy evaluation, is displayed in Table 6's proportion matrix. With this assistance, variables that are susceptible to change as a result of circumstances that may cause these changes may be evaluated and a future image of these variables can be provided.

b. Proportion Matrix

Table 6. Matrix Proposition

Rank	Label	Dirrect influence	Label	Dirrect influence	Label	Dirrect influence	Label	Dirrect influence
1	ARDB	776	CBV	776	ARDB	763	CBV	761
2	CC	757	MCT	757	CC	745	MCT	748
3	LRP	719	CC	757	LRP	717	CC	745
4	MIKRF	719	UIT	738	MAGC	716	UIT	727
5	MAGC	719	MAGC	719	MIKRF	716	MAGC	711
6	UIT	719	LRP	700	UIT	705	LRP	701
7	CBV	700	EMC	681	CBV	701	EMC	684
8	MCT	681	CFIG	643	MCT	672	CFIG	650
9	EMC	662	MIKRF	643	EMC	670	MIKRF	648
10	QSPI	625	ARDB	625	QSPI	639	ARDB	628
11	RM	625	QSPI	606	RM	627	QSPI	616
12	CMP	606	CMP	606	CMP	597	RCLD	606
13	CFIG	568	RCLD	606	CFIG	580	CMP	602
14	RCLD	568	RM	587	RCLD	578	RM	596
15	SHU	549	SHU	549	SHU	567	SHU	570

Rank	Label	Dirrect influence	Label	Dirrect influence	Label	Dirrect influence	Label	Dirrect influence
1	MCT	703	ARDB	703	MCT	700	ARDB	700
2	QSPI	703	QSPI	686	QSPI	700	SHU	685
3	LRP	686	SHU	686	CMP	685	CBV	685
4	ARDB	686	CBV	686	LRP	685	QSPI	685
5	MIKRF	686	LRP	670	MIKRF	685	CFIG	670
6	CMP	686	MCT	670	ARDB	684	RM	670
7	CC	670	CFIG	670	CBV	669	CC	669
8	CBV	670	MIKRF	670	CC	668	MCT	669
9	CFIG	653	RM	670	CFIG	654	LRP	669
10	RM	653	CC	670	RCLD	654	MIKRF	669
11	RCLD	653	EMC	653	RM	653	UIT	653
12	EMC	636	UIT	653	EMC	639	EMC	653
13	MAGC	636	MAGC	636	UIT	639	MAGC	640
14	UIT	636	CMP	636	SHU	639	CMP	639
15	SHU	636	RCLD	636	MAGC	638	RCLD	638

Source: MICMAC Analyst System, 2024

Table 6 shows the condition analysis of direct influence and direct dependence. This analysis shows the condition of direct influence and direct dependence. The variables that show the greatest influence and can be said to be the key factors for the sustainability of the Revolving Fund program are the administrative requirements of the LPDB Revolving Fund (ARDB) and members' information and knowledge about the Revolving Fund (MIKRF). This finding is in line with participation theory which emphasizes that administrative knowledge and involvement are essential in ensuring program sustainability and effectiveness. The variables with the highest dependency are cooperative capital (CC), use of information technology (UIT), administrative governance capability (MAGC), LPDB regulatory policy (LRP), cooperative business volume (CBV), and cooperative member trust (MCT). This supports social capital theory, which asserts the importance of trust and social networks in improving organizational performance.

Forecasting indicated by the indirect effect and indirect dependency identified member participation (CMP) as the most influential variable. This underscores the participation theory which states that the active involvement of members can influence the overall success of the program. Meanwhile, the most dependent variables are member and community trust (MCT), service quality and product innovation, member information and

knowledge about Revolving Funds (MIKRF), LPDB regulatory policies (LRP), LPDB Revolving Fund administrative requirements (ARDB), member and community trust (MCT), and cooperative business volume (CBV). The ranking of variables in action can be seen from the direct effect and potential indirect dependency for forecasting. The results of direct and indirect effects as well as direct and indirect dependencies show that the variable of member information and knowledge about Revolving Funds (MIKRF) can shift its position to administrative management (MAGC). While in the ranking of dependency variables, member participation (CMP) may decrease and be replaced by the cooperative's role in local development (RCLD). These findings confirm that to achieve long-term effectiveness, management strategies must take into account complex social and economic dynamics in accordance with the grand theory used.

7. Conclusion

Based on the comprehensive analysis of the LPDB revolving fund program and its sustainability factors, several key conclusions and recommendations can be drawn.

Firstly, it is evident that both external and internal factors play crucial roles in determining the sustainability of the LPDB revolving fund program. Factors such as administrative requirements and members' knowledge about the program significantly influence its sustainability. Therefore, to ensure the long-term viability of the program, it is essential to streamline administrative processes and enhance member education and awareness regarding the benefits and opportunities offered by the LPDB revolving fund.

Secondly, the utilization of LPDB revolving funds has a substantial positive impact on the economic empowerment of micro, small, and medium enterprises (MSMEs) as well as cooperatives. By providing access to financial resources, the program stimulates business growth, fosters entrepreneurship, and contributes to poverty alleviation. Therefore, it is imperative to continue promoting and expanding the reach of the LPDB revolving fund to maximize its socioeconomic benefits.

Thirdly, the implementation of strict eligibility criteria and effective monitoring mechanisms significantly enhances the sustainability and effectiveness of the LPDB program. By ensuring that funds are allocated to deserving recipients and monitoring their usage, the program can mitigate risks and prevent misuse of resources. Hence, policymakers should prioritize the enforcement of robust regulatory policies and invest in advanced information technology systems to improve transparency, accountability, and efficiency in fund management.

In conclusion, to maintain the sustainability of LPDB's revolving fund program, stakeholders should focus on optimizing administrative processes, improving member education and awareness, expanding fund utilization among MSMEs and cooperatives, and strengthening regulatory oversight. By addressing these key issues, the program can continue to serve as an important instrument to drive economic development, empower local communities, and promote inclusive growth across Indonesia. However, there are still external factors such as macroeconomic conditions and broader government policies that have not been fully covered in this study. For future research development, researchers can expand the geographical coverage and take into account more external variables that affect the sustainability of the LPDB revolving fund program. Future research could also use a more comprehensive methodological approach, including longitudinal analysis to understand the long-term dynamics of the identified factors..

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