

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Dwiputri, Inayati Nuraini; Prastiwi, Lustina Fajar; Agustin, Grisvia; Ibrahim, Mochammad Daffa

Article

The effect of cooperatives credit to the welfare

UTMS Journal of Economics

Provided in Cooperation with: University of Tourism and Management, Skopje

Suggested Citation: Dwiputri, Inayati Nuraini; Prastiwi, Lustina Fajar; Agustin, Grisvia; Ibrahim, Mochammad Daffa (2022) : The effect of cooperatives credit to the welfare, UTMS Journal of Economics, ISSN 1857-6982, University of Tourism and Management, Skopje, Vol. 13, Iss. 2, pp. 276-284

This Version is available at: https://hdl.handle.net/10419/281926

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



ND https://creativecommons.org/licenses/by-nc-nd/4.0/





Inayati Nuraini Dwiputri, Lustina Fajar Prastiwi, Grisvia Agustin, and Mochammad Daffa Ibrahim. 2022. The Effect of Cooperatives Credit to the Welfare. *UTMS Journal of Economics* 13(2): 276–284.

Original scientific paper

THE EFFECT OF COOPERATIVES CREDIT TO THE WELFARE

Inayati Nuraini Dwiputri ¹ Lustina Fajar Prastiwi Grisvia Agustin Mochammad Daffa Ibrahim

Abstract

Cooperatives are considered to have provided benefits and advantages for the community who are members of the cooperative especially, both households, community groups and business actors. However, with the development of the world economy, the existence of cooperatives is now considered to be starting to shift. One of the assumptions in society that is currently arising is that cooperatives have started to lose the principles of kinship, especially savings and loan cooperatives which have started to be profit-oriented, so the impact of these cooperatives is starting to be questioned. Therefore, this study wants to identify the effect of savings and loan cooperatives in improving people's welfare and increasing the performance of businesses. Regression analysis shows that the use of credit savings and loan cooperatives can have a positive effect in improving people's welfare. This research can be used as the basis for formulating community policies in an effort to improve community welfare through cooperatives.

Keywords: saving, loan, cooperative, welfare, omzet

JEL classification: F63, F61, G18, G21

INTRODUCTION

Cooperative is one of the financial institutions in Indonesia as a manifestation of the Pancasila Economy. In the article of the state constitution, it is stated that the economy is structured as a joint business based on the principle of kinship, in which one of the microfinance institutions in accordance with that article is a cooperative. Various types of cooperatives that have grown in Indonesia include village unit cooperatives, professional-based cooperatives, and savings and loan cooperatives. Until now, cooperatives are considered to play an important role in improving the community's economy. Various studies have been conducted and show that cooperatives have a positive effect on improving the community's economy (Debela, et al. 2017; Grashuis & Su, 2018; Su & Cook, 2020; Wassie, et al., 2019).

¹ Inayati Nuraini Dwiputri, M.Sc (lecturer); Lustina Fajar Prastiwi, M.Ec.Dev; Dr. Grisvia Agustin, M.Sc (lecturer), Mochammad Daffa Ibrahim (student), Department of Economics, Faculty of Economics and Business, Universitas Negeri Malang, Indonesia.



McKillop et al. (2020) considers that cooperatives have an important role in the world's financial system. Sentime (2019) argues that cooperatives play an important role in the development of human capital, social capital, and community financial capital and village development. So far, cooperatives are considered to have provided benefits and advantages for the community especially for their members (households, community groups and business actors). However, with the development of the world economy, the existence of cooperatives has begun to shift. Currently, the competition between cooperatives and non-cooperative institutions which are quite high, has caused cooperatives lead to the corporate model and begin to abandon the main principles of cooperatives (Iyer et al., 2021).

Some of the phenomena of cooperatives in society, among others, are that many cooperatives currently starting to eliminate the principles of kinship. Government policies in regulating financial institutions such as cooperatives are considered less able to have a positive impact on cooperatives. Iyer et al. (2021) added that in the context of Indonesian cooperatives, the government can play a role as creator but also as a destroyer of cooperative institutions because of their policies or agendas. Therefore, this study wants to identify the effect of savings and loan cooperatives in improving people's welfare in Batu City in particular.

This study was conducted in Batu City, Indonesia, it is because Batu City is one of the tourism objects with a large number of tourist visits in East Java². The tourism sector triggers the emergence of creative industries in Batu City, where many creative businesses collaborate with cooperatives. Therefore, many people in Batu City use cooperatives so that Batu City cooperatives are considered to have an important role in improving the community's economy. This study was conducted on the people of Batu City who use credit facilities at savings and loan cooperatives in Batu City.

1. LITERATURE REVIEW

Cooperatives play an important role in the world economy (McKillop et al., 2020). Debela, Diriba, & Bekeley (2017), Iyer et al. (2021), Su & Cook (2020) argue that cooperatives play an important role as an economic driver, especially in local communities. Cooperatives and society are interconnected in the Pancasila economic system, which values based on kinship and cooperation are one of the reasons Indonesian people become members of cooperatives. Tremblay et al. (2019) revealed that the value of kinship and cooperation among cooperative members is higher than that of non-cooperative members. Likewise, Rustinsyah (2019) argues that cooperative is a microfinance institution with social goals. The existence of cooperatives in the community is not only beneficial in the scope of households and small businesses, but also in a larger scope.

In some countries, cooperatives aim to improve the welfare of the community and it has been regulated in legislation. Iyer et al., (2021) stated that the cooperative law in

² East Java is a province that has the second highest Gross Domestic Regional Product (GDRP) 2021 in Indonesia (bps.go.id, 2022).

Korea has made it easy to open a business, furthermore, the constitution in the Philippines has recognized cooperatives as a tool for equity, social justice and economic development. Iyer et al., (2021) proved that in Japan, Malaysia and India, cooperative laws have helped the growth of the agricultural sector and have made it easier for cooperative members to get finance or credit.

As an institution that is close to the community, cooperatives are considered to have a large socio-economic impact on the welfare of the community. Many studies on cooperatives from various regions of the world have found that cooperatives have an effect on people's welfare. The welfare of the community can increase when they become a member of a cooperative because there are some benefits that are obtained by members (McKillop et al., 2020; Silva & Morello, 2021). That facility is especially in terms of the ease of savings and loans for households and small and medium enterprises (Sentime, 2019).

The community considers cooperatives to be safe to store funds and can be a major source of loans (McKillop et al., 2020). It is not only the community individually, small to medium business actors also take advantage of cooperatives in running their businesses. The difficulties and problems faced by the community in running a business so far can be resolved by the existence of a cooperative. This is in line with the research of Nitani & Legendre (2021) which explains that cooperatives can improve the welfare of small and medium business actors as lenders, especially for businesses that are experiencing financing difficulties. Indonesian community groups in agriculture and animal husbandry are also helped by cooperatives.

Farmers and ranchers get the positive effect of cooperatives in dealing with production constraints, lack of knowledge of risks, difficult access to loans, and lack of understanding of the use of sophisticated technology. Ma & Abdulai (2016), Abass et al. (2017), Hooks et al. (2017), Lin et al., (2021), Pokharel & Featherstone (2021), Tuna & Quarantininis (2021) found that farmer membership in cooperatives can increase income farmers, agricultural productivity, efficiency agricultural techniques, assisting farmers in risk management, and improving the quality of information of products and markets. From the farmer's perspective, the research of Chagwiza et al. (2016) in Ethiopia, Kumar et al. (2018) in India, Rustinsyah (2019) in Indonesia, and Jitmun et al. (2020) in Thailand showed that the effect of cooperatives on farmer groups, can improve livestock quality, livestock productivity techniques, and increasing farmer income.

The Savings and Loans Cooperative is a cooperative that aims to collect savings and create sources of credit with reasonable interest rates for their members that are adapted to the conditions of the poor and low-income people (Henock, 2019). Beside economic impact, Rustinsyah (2019) found that cooperatives can provide other social impacts, namely creating jobs, carrying out village development, collaborating with educational institutions, and assisting their members in establishing relationships with the Livestock Service Office and the Ministry of Agriculture especially in coaching and mentoring. The guidance and assistance to farmers and ranchers can effect an increasing livestock production, therefore they can help meet the needs of domestic cattle.

A good understanding of cooperatives needs to be carried out by all parties including the government in order to create policies that do not eliminate the main principles of the

formation of cooperatives. The government needs to actively socialize cooperative values to society (Iyer et al., 2020). It aims to increase public knowledge and optimize community participation. Good cooperation between cooperatives and the government is needed for the survival of Indonesian cooperatives in facing the challenges today. Government can help cooperatives by had beneficial policies and help marketing of cooperative products.

2. METHODS

This study uses *cross section* data. The analytical method used in this study is multiple regression analysis with the following model.

 $C_{ijt} = \alpha_0 + \beta_1 D_C Credit + \beta_2 X_{ijt} + \beta_3 Y_{ijt} + v_{ijt}$

 C_{ijt} is a variable that states the increase in people's welfare as measured by the total consumption (expenditure) of the community for food and non-food. X_{ijt} are control variables namely individual characteristics. Y_{ijt} are control variables, namely the characteristics of the credit used. Thus, the analytical method used is multiple linear regression analysis with the Ordinary Least Square (OLS) method.

3. RESULTS AND DISCUSSION

This study identified the effect of cooperatives on 120 respondents. Of the 120 respondents only 115 respondents who filled out the questionnaire to completion. The number of respondent's family members is at least having no family members and at most having 4 (four) family members. The average age of the research respondents was 37.4 years with a minimum age of 21 years and a maximum age of 58 years. This shows that the age of the research respondents is in the productive age. Based on the education level of the respondents, the average is high school graduates (SMA). The lowest education level of the research respondents was Elementary School (SD) and the highest education level was Master Program.

Description analysis shows that from 115 respondents the minimum credit taken by respondents is Rp. 500,000 and the maximum is Rp. 50,000,000, of which 80 respondents use it for productive purposes, while the rest use it for consumptive purposes. On average, the amount of credit taken is around Rp. 6,000,000. The minimum credit period taken by the respondents is 3 months and the maximum is 36 months with an average credit period of 11.7 months. The results of the analysis are represented in Table 1.

The analysis shows that the variables which have a significant effect on improving the welfare of the community especially in Batu City cooperative credit users are age, marital status, number of family members, status of the person in charge of the family, education, business ownership status, risk preference, the amount of credits, and the credit period. The higher the age of the respondent, the tendency to have a higher level of welfare than respondents with a younger age. This is in accordance with the general condition that by increasing age, the length of work experience will be associated with the length of education taken.

Marital status also has a significant effect on improving people's welfare. Individuals with married status have a higher tendency to achieve household welfare using cooperative credit than individuals with unmarried status. This could be due to the high household consumption needs of married individuals compared to unmarried individuals. Married individuals have higher consumption which is triggered by a higher number of household members than unmarried individuals. This is in accordance with the variable number of family members which also has a significant positive effect on increasing family welfare. The more the number of families, the more consumption will be. This finding is consistent with Dwiputri (2020).

Table 1. The Effect of the Use of Cooperative Credit on Community Welfare				
	Model (1)	Model (2)	Model (3)	Model (4)
age	0.0210***	0.0220***	0.0215***	0.0228***
-	(0.00387)	(0.00409)	(0.00415)	(0.00416)
status	-0.454***	-0.365***	-0.353***	-0.366***
	(0.0949)	(0.0971)	(0.0986)	(0.0971)
hhmember	0.144***	0.144***	0.135***	0.146***
	(0.0257)	(0.0252)	(0.0279)	(0.0253)
tanggung	0.292***	0.243***	0.236***	0.248***
	(0.0626)	(0.0628)	(0.0637)	(0.0629)
educ	0.0199**	0.0208*	0.0170	0.0232**
	(0.00841)	(0.0110)	(0.0120)	(0.0113)
business	0.678***	0.563***	1.147	0.568***
	(0.0653)	(0.0728)	(0.756)	(0.0725)
risk	0.135***	0.130***	0.121***	
	(0.0300)	(0.0317)	(0.0338)	
In_amountcredit		0.105**	0.142**	0.0761*
		(0.0431)	(0.0649)	(0.0457)
In_monthcredit		-0.330***	-0.345***	-0.329***
		(0.0994)	(0.101)	(0.0993)
business_Inamount			-0.0396	
			(0.0510)	0.00920***
risk_Inamount				(0.00223)
			***	()
_cons	-1.353***	-2.111***	-2.535	-1.770***
	(0.222)	(0.411)	(0.683)	(0.417)
N	115	115	115	115
Prob > F	0.000	0.000	0.000	0.000
Adj R-squared	0.6647	0.6908	0.6896	0.6912

Note: Standard errors in parentheses

^{*} *p* < 0.1, ^{**} *p* < 0.05, ^{***} *p* < 0.01

All models meet the OLS assumption except that Model 3 does not meet the nonmulticollinearity assumption.

The results of the study also found that the higher the level of education, the higher the welfare of the community. This is in accordance with Dwiputri et al (2022) which states that the education of the head of the household can affect the welfare of his household. A high level of education provides a better opportunity to get a high income job so that education can have an effect on increasing the level of community welfare.

Respondents who have businesses tend to have a better level of welfare than respondents who do not own businesses. Respondents in this study consisted of 35 respondents who did not have a business and 80 respondents who had a business. Respondents who have businesses tend to use cooperative credit for productive

(business) purposes. Then, the variable of business ownership tends to affect the level of community welfare.

This study also found that respondents' preferences for risk also affect their level of well-being. The more risk-averse they tend to improve their well-being. The preference for risk can affect respondents' preferences in conducting and developing their business, or having a preference for higher challenges in their work. Therefore, it tends to affect their income which in turn will affect their level of welfare.

The variable amount of credit has a positive effect on the level of community welfare where the more number of cooperative loans taken will affect the level of welfare of the respondents. The amount of credit taken can be used by the community to carry out economic activities and increase their productivity. This finding is in accordance with the research of Dwiputri et al (2022). Thus, cooperatives can play an important role in the community's economy (Iyer et al., 2021; McKillop et al., 2020; Schmidt, 2016).

The credit period has a significant negative effect on the level of family welfare. The longer the credit period taken, the lower the level of community welfare. It could be because the credit burden borne in a longer credit period that can cause the budget allocation for household needs to decrease over a longer period of time. This is because household needs will increase over time.

By the significant effect of the use cooperatives credit on the welfare of society, it is necessary to continuously improve the quality of cooperative management. The main problems of cooperatives are management and financial problems including risk management. Risk management is very important and useful for directors and managers of cooperatives (Chareonwonsak, 2017; Pokharel et al., 2020). Therefore, it is necessary to train managers and directors of cooperatives on the importance of risk management. Kontogeorgos et al. (2016) found that effective organization and management can affect the performance of cooperatives in Greece.

The efficiency of cooperative management is a prerequisite for cooperative in achieving sustainability and resilience. Then, it must be considered in the managerial of cooperatives. In addition, information technology and the use of digital technology are indispensable for cooperatives in their efforts to develop the business (Mozas-Moral et al., 2021; Mushonga et al., 2018; Pokharel et al., 2020). The digitalization of cooperatives is needed in understanding the consumer behavior, as well as an alternative medium of promotion and traditional sales. The results of this study can be a strategy for cooperatives in Batu City in particular so that they can develop to help the community.

CONCLUSION

The results of the analysis show that the use of cooperative credit is able to improve the welfare of the people of Batu City in particular. The higher the number of cooperative credits used, the higher the level of community welfare. However, the longer credit period can reduce the level of community welfare because it can be caused by the increasing cost of living for the community from year to year. This study provides 281

additional empirical evidence that the use of cooperative credit in the community can improve the economy.

REFERENCES

- Abass, A., Amaza, P., Bachwenkizi, B., Wanda, K., Agona, A., & Cromme, N. (2017).
 "The impact of mechanized processing of cassava on farmers' production efficiency in Uganda". *Applied Economics Letters*. 24(2), 102-106. https://doi.org/10.1080/13504851.2016.1167817
- Chagwiza, C., Muradian, R., & Ruben, R. (2016). "Cooperative membership and dairy performance among smallholders in Ethiopia". *Food Policy*, 59, 165-173. https://doi.org/10.1016/j.foodpol.2016.01.008
- Chareonwongsak, K. (2017). Enhancing board motivation for competitive performance of Thailand's co-operatives. *Journal of Co-Operative Organization and Management*, 5(1), 1–13. https://doi.org/10.1016/j.jcom.2017.01.001
- Debela, M., Siriba, S. & Bekeley, H. (2017). "Impact of Cooperatives Membership on Economy in Eastern Oromia: the case of Haramaya Agricultural Farmers' Cooperative Union (HAFCU)". Annals of Public and Cooperative Economics 89(2): 361-376.
- Dwiputri, I.N. (2020). "Relationship Between Non-Formal Credit and the Welfare of Indonesian Households", *International Conference on Islam, Economy, and Halal Industry* Volume 2020: 31-45. KnE Social Sciencess.
- Dwiputri, I.N., Prastiwi, L.F., & Agustin, G. (2022). "The Effect of Banks and Cooperatives in Improving Welfare". Jurnal Ekonomi Kuantitatif Terapan 15(1): 59-71.
- Grashuis, J & Su, Y. (2018). "A Review of the Empirical Literature on Farmer Cooperatives: Performance, Ownership and Governance, Finance, and Member Attitude". Annals of Public and Cooperative Economics 90 (1): 77-102.
- Henock, M. (2019). Financial sustainability and outreach performance of saving and credit cooperatives: The case of Eastern Ethiopia. Asia Pacific Management Review, 24(1), 1–9. https://doi.org/10.1016/j.apmrv.2018.08.001
- Hooks, T., McCarthy, O., Power, C., & Macken-Walsh. (2017). "A co-operative business approach in a values-based supply chain: A case study of a beef cooperative". Journal of Co-Operative Organization and Management, 5(2), 65–72. https://doi.org/10.1016/j.jcom.2017.10.001
- Iyer, B., Gopal, G., Dave, M., & Singh, S. (2021). "Centering cooperatives and cooperative identity within the social and solidarity economy: Views from the Asia-Pacific cooperative apexes and federations". *Journal of Co-Operative Organization* and Management, 9(2), 1-15. https://doi.org/10.1016/j.jcom.2021.100145
- Jitmun, T., Kuwornu, J. K. M., Datta, A., & Anal, A. K. (2020). "Factors influencing membership of dairy cooperatives: Evidence from dairy farmers in Thailand". Journal of Co-Operative Organization and Management, 8(1), 1-9. https://doi.org/10.1016/j.jcom.2020.100109

- Kumar, A., Saroj, S., Joshi, P. K., & Takeshima, H. (2018). "Does cooperative membership improve household welfare? Evidence from a panel data analysis of smallholder dairy farmers in Bihar, India". *Food Policy*, 75, 24–36. https://doi.org/10.1016/j.foodpol.2018.01.005
- Lin, B., Wang, X., Jin, S., Yang, W., Li, H. (2021). "Impacts of cooperative membership on rice productivity: Evidence from China". World Development. 150. https://doi.org/10.1016/j.worlddev.2021.105669
- Ma, W., & Abdulai, A. (2016). "Does cooperative membership improve household welfare? Evidence from apple farmers in China". *Food Policy*, 58, 94–102. https://doi.org/10.1016/j.foodpol.2015.12.002
- McKillop, D., French, D., Quinn, B., Sobiech, A. L., & Wilson, J. O. S. (2020). "Cooperative financial institutions: A review of the literature". *International Review* of Financial Analysis, 71. https://doi.org/10.1016/j.irfa.2020.101520
- Mozas-Moral, A., Fernández-Uclés, D., Medina-Viruel, M. J., & Bernal-Jurado, E. (2021). The role of the SDGs as enhancers of the performance of Spanish wine cooperatives. *Technological Forecasting and Social Change*, 173. https://doi.org/10.1016/j.techfore.2021.121176
- Mushonga, M., Arun, T. G., & Marwa, N. W. (2018). Drivers, inhibitors and the future of co-operative financial institutions: A Delphi study on South African perspective. *Technological Forecasting and Social Change*, 133, 254–268. https://doi.org/10.1016/j.techfore.2018.04.028
- Nitani, M., & Legendre, N. (2021). "Cooperative lenders and the performance of small business loans". *Journal of Banking & Finance*, 128, 106125. https://doi.org/10.1016/j.jbankfin.2021.106125
- Pokharel, K. P., Archer, D. W. & Featherstone, A. M. (2020). The Impact of Size and Specialization on the Financial Performance of Agricultural Cooperatives. *Journal of Co-operative Organization and Management, 8*(2). https://doi.org/10.1016/j.jcom.2020.100108
- Pokharel, K.P., & Featherstone, A.M. (2021). "Examining the productivity growth of agricultural cooperatives: The biennial malmquist index approach". Journal of Cooperative Organization and Management, 9(2). https://doi.org/10.1016/j.jcom.2021.100148
- Rustinsyah, R. (2019). "The significance of social relations in rural development: A case study of a beef-cattle farmer group in Indonesia". *Journal of Co-Operative Organization* and Management, 7(2), 1-7. https://doi.org/10.1016/j.jcom.2019.100088
- Schmidt, O. (2016). "How Cooperative Are Savings and Credit Cooperatives in Developing Countries?: An Analysis of Datasets From Uganda". Annals of Public and Cooperative Economics 88(3): 345-368.
- Sentime, I. (2019). Co-operatives in the Democratic Republic of Congo: A literature review. *Journal of Co-Operative Organization and Management*, 7(1), 1–9. https://doi.org/10.1016/j.jcom.2018.11.002
- Silva, L. F., & Morello, T. (2021). Is there a trade-off between efficiency and cooperativism? Evidence from Brazilian worker cooperatives. *Journal of Co-*

Inayati Nuraini Dwiputri, Lustina Fajar Prastiwi, Grisvia Agustin, and Mochammad Daffa Ibrahim. 2022. The Effect of Cooperatives Credit to the Welfare. *UTMS Journal of Economics* 13(2): 276–284.

Operative Organization and Management, 9(2), 1-13. https://doi.org/10.1016/j.jcom.2021.100136

- Su, Y. & Cook, M.L. (2020). "Advances in Agriculture Research Since 2007: A Review of Chinese Agricultural Economics Literature". *Annals of Public and Cooperative Economics* 91(4): 519-543.
- Tremblay, E., Hupper, A., & Waring, T. M. (2019). Co-operatives exhibit greater behavioral cooperation than comparable businesses: Experimental evidence. *Journal* of Co-Operative Organization and Management, 7(2), 1-7. https://doi.org/10.1016/j.jcom.2019.100092
- Tuna, E., & Karantininis, K. (2021). "Agricultural cooperatives as social capital hubs A case in a post-socialist country. *Journal of Co-Operative Organization and Management*, 9(1), 1-7. https://doi.org/10.1016/j.jcom.2021.100134
- Wassie, S.B., Kusakari, H. and Masahiro, S. (2019). "Inclusiveness and Effectiveness of Agricultural Cooperatives: recent evidence from Ethiophia". *International Journal of Social Economics* 46(5): 614-630.