Factors Impacting the Remaining Income of Village Unit Cooperative

Lestari Rahayu Waluyati[1], Jamhari[1], Abi Pratiwa Siregar[1,2][✉], Dewi Meitasari[3], Anila Indrianti Anggraini[1], Ikrimah Nur Hanifah[1], Dian Ari Ramadhani[3]

[1]Study Program of Agricultural Economics and Agribusiness, Department of Agricultural Socio-economics, Faculty of Agriculture, Universitas Gadjah Mada, Daerah Istimewa Yogyakarta, Indonesia

[2]College of Arts, Social Sciences, and Celtic Studies, The University of Galway, Galway, Ireland

[3]Study Program of Master of Agribusiness Management, Department of Agricultural Socio-economics, Faculty of Agriculture, Universitas Gadjah Mada, Daerah Istimewa Yogyakarta, Indonesia

[✉]Correspondence E-mail: abipratiwasiregar@ugm.ac.id

Keywords:	Abstract
Equity, Liability, Number of members, Total asset	Cooperatives have different characteristics and goals from profit-oriented entities (Investor-Owned Firms (IOFs)). Nevertheless, obtaining income higher than the costs incurred (surplus) is one of the efforts that can be made to maintain the sustainability of the business unit and the cooperative organization itself. Based on these conditions, this study aims to determine the factors that affect the remaining income. The type of data used in this study is secondary data obtained from cooperative stakeholders. The objective of this study has been answered by using multiple regression analysis with the common effect model. The independent variables consist of the number of members, own capital, and external capital. Furthermore, based on data analysis, it can be concluded that of the three exogenous variables, only own capital and external capital has a significant effect, and both have a positive impact. The findings of this study strengthen the strategic role of reserve fund allocation and other efforts to increase own capital to support organizational and business development. On the other hand, the increase in external capital needs to be watched carefully. Although it helps increase the remaining income, this type of capital has financial burden consequences.

Introduction

The remaining income is the cooperative income earned in one financial year minus costs, depreciation, and other obligations included in the relevant financial year (Article 45 paragraph 1 of Law number 25 of 1992 concerning Cooperatives). The provisions regarding the distribution of the remaining income apply in Indonesia and throughout the world. Due to the regulation, this condition is one of the cooperative principles that have been agreed upon among the international cooperative movement through the International Cooperative Alliance (ICA, 2022). The initiation of profit sharing for members stems from the practice carried out by cooperatives before the 19th century (Fairbairn, 1994). The Rochdale Society of Equitable Pioneers, which was founded on August 15, 1844, was the first modern cooperative that made the distribution of profits to owners the foundation of the cooperative (Pencavel, 2020). This principle is established as one of the natural supports in improving the standard of living of cooperative members (Ridley-Duff & Bull, 2019; Barreiros et al., 2021).

Saleh et al. (2022) explained that amid increasingly fierce business competition between cooperatives and non-cooperative entities, this organization also needs to meet members' needs regarding the distribution of the remaining income. Awoke (2021) uses profit sharing as one of the economic aspects in estimating the factors that influence member commitment. The study's results show that the payment for operating results has a positive effect on strengthening members' commitment.

Considering the relationship of income and costs to the distribution of the remaining income, with the assumption of the variable is being held constant, there are three ways for a cooperative to provide greater profit sharing to members, namely: 1) income increases more than increases in expenditure, 2) income increases, while expenses remain, and 3) income remains, but expenses fall. On the other hand, an additional effort can be made by holding a members' meeting to determine the increase in the percentage of operating profit sharing to members in the surplus obtained by the cooperative.

Kumkit et al. (2022) used the Fixed Effect Model (FEM) to estimate the effect of the percentage of members attending the annual meeting, the number of administrators, and the level of education of managers on the cooperative's profit sharing. Two of the three variables have a significant and negative effect, while one other has a significant and positive effect. The percentage of member participation in the annual meeting and the increasing number of management impact the decline in the cooperative's profit sharing. The reasons behind these two conditions are 1) participation in the annual meeting only sometimes reflects active participation or constructive contribution, and 2) an increasing number of people in management will result in higher costs and tend to be less effective in managing the organization or business. On the other hand, the higher the level of

education of the manager, ceteris paribus, it can increase the cooperative's income, which indirectly encourages an increase in profit sharing.

Kementerian Koperasi dan UKM Republik Indonesia (2022) stated that the number of cooperatives decreased by 6,075 units or about 4% per year, from 2017 tto 2021. On the other hand, the number of members consistently continues to grow from time to time, approximately 2,217,923 people or 10.43% per year. Furthermore, the remaining operating income in each financial year for the last five years tends to increase, around 564 million rupiahs or 10.35% per year. This condition shows that cooperatives in Indonesia are more productive and efficient. However, due to the increase in the number of members exceeding the percentage increase in the remaining operating income, the profit sharing received for each member tends to be smaller.

In general, the agricultural sector still plays a strategic role in economic development in Indonesia and at the provincial level (Siregar et al., 2020; Siregar et al., 2021). On this basis, efforts to overcome the problems faced by one producer and another are carried out jointly through an organization, and one of them is a cooperative. If viewed by type, cooperatives in Indonesia can be divided into two: food cooperatives and non-food cooperatives. Kementerian Koperasi dan UKM Republik Indonesia (2019) describes food cooperatives as agricultural cooperatives, village unit cooperatives, plantation cooperatives, livestock cooperatives, fisheries-fishermen cooperatives, and forestry cooperatives. Among some cooperatives spread across all provinces in Indonesia, the largest remaining income from operations was achieved by village unit cooperatives. Furthermore, in terms of distribution of the number of members in each village unit cooperative, it is known that the ratio of the number of members to the largest number of cooperatives is held by Daerah Istimewa Yogyakarta (DIY). BPS Daerah Istimewa Yogyakarta (2022) explains that this region consists of four regencies and one city. Then, BPS Kabupaten Sleman (2022) noted that among the second-level administrative regions in DIY, Sleman Regency is one of the areas with the most significant number of active village unit cooperatives, 17 units.

In line with the previous literature, Saputra and Triyono (2020) use the variables of their capital, business volume, and assets to estimate the residual value of operating results. Village unit cooperatives in the future. The results showed that the volume of business and assets had a significant but different effect. The greater the volume of business, ceteris paribus, the remaining operating results tend to increase. On the other hand, the greater the value of assets, assuming other variables are held constant, the residual value of operating results tends to decrease.

Putri & Yulhendri (2019) used the number of members and their own capital as independent variables to determine the effect on the remaining business results of village unit cooperatives in Padang City, while Kurniawan & Yulhendri (2020) used the number of members, own capital, and loan capital as exogenous variables for find out the impact on the remaining business results of unit-village cooperatives in districts/cities in the province of West Sumatra. Both studies use panel data to better capture the dynamics of the influence of the independent variable on the dependent variable, compared to data at a particular time (cross-section data). In Putri & Yulendri's research (2019), the Random

Effect Model (REM) was selected, with the following estimation results: the number of members and their own capital, each having a significant and positive effect, with coefficients of 0.9939 and 0.4915. In other words, increasing the number of members and their capital will encourage an increase in the remaining operating results. Furthermore, using REM, the findings from the research of Kurniawan & Yulhendri (2020) are the same as those of Putri & Yulhendri (2019), where the number of members and their capital has a significant and positive effect. Meanwhile, the third independent variable (loan capital) has no significant effect.

Based on data from Kementerian Koperasi dan UKM Republik Indonesia (2019), a study is needed to determine the remaining determinants of the business results of village unit cooperatives in Sleman Regency, DIY. This situation considers three things, namely: this area is one of the areas that have the most active village unit cooperatives, the ratio between members and village unit cooperatives is relatively high (so that the increase in remaining business results and distribution of business to members becomes more strategic), and a study of the factors that affect the remaining business results using panel data and the latest, as far as researchers search, cannot be found in publications in accredited national journals or reputable international journals, in the last five years. The most recent publication regarding the remaining determinants of the results of cooperative village operations in DIY can be found in Siregar & Jamhari (2013).

This study uses the latest data and time series. It adds information to the existing literature regarding the determinants of the remaining business results, especially in DIY. Furthermore, this study aims to determine the effect of the number of members, own capital, external capital, and total assets on the remaining operating results.

RESEARCH METHODS

This research was conducted in Sleman Regency, with consideration as one of the areas with the largest number of active village unit cooperatives in DIY. The number of village unit cooperatives in Sleman Regency is 17 units and spread over 17 sub-districts. Based on this number, all village unit cooperatives hold annual member meetings and present reports on these meetings for the most recent year's closing, 2021.

Furthermore, this study uses secondary data derived from organizational documents, village cooperative business units, and information presented by the Cooperatives, Small and Medium Enterprises Office of Sleman Regency (Dinas Koperasi, Usaha Kecil dan Menengah Kabupaten Sleman) from 2019 to 2021. The consideration for choosing the three years is the availability of data, both at the village unit cooperative level and the regional apparatus level. Seventeen cooperative village units and regional apparatuses have archives for three years.

The analytical method used to answer the research objectives is a multiple regression analysis of panel data with respect to the number of village unit cooperatives, as many as 17 units and research data starting from 2019 to 2022.

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e_{it} \tag{1}$$

Where : Y= Remaining income of village unit cooperative, β_0 = Intercept, β_1 - β_4 = Coefficient of the first until fourth independent variable, X_1 = Number of members, X_2 = Internal capital, X_3 = External capital, X4 = Total asset, e = residual, i = Village unit cooperative *i*-th (1, 2, 3, ..., 17), and t = Year *i*-th (2019, 2020, dan 2021).

In connection with the use of panel data, the selection of the model to be used is first carried out, whether Common Effect (CEM), FEM, or REM. There are three tests, namely the Chow test (CEM and FEM), the Hausman test (FEM and REM), and the Lagrange Multiplier (LM) test (Baltagi, 2005). In this study, regression analysis and selection implementation among the three models used STATA 16. Thus, the flow of the three tests is as follows:

1. Chow test
   - If the Prob>F value is greater than 0.05 (alpha 5%), then CEM is selected, and proceeds to the LM test.
   - If the Prob>F value is less than 0.05 (alpha 5%), then FEM is selected, and proceeds to the Hausman test.
2. Hausman test
   - If the Prob>F value is greater than 0.05 (alpha 5%), then CEM is selected, and proceeds to the LM test.
   - If the Prob>chi2 value is less than 0.05 (alpha 5%), then FEM is selected, and then the data is analyzed using FEM.
3. LM test
   - If the value of Prob > chibar2 is greater than 0.05 (alpha 5%), then REM is selected, and then the data is analyzed using REM.
   - If the value of Prob > chibar2 is less than 0.05 (alpha 5%), then CEM is selected, and then the data is analyzed using CEM.

Tabel 1. Model Selection to Estimate Factors Impacting Remaining Income of Village Unit Cooperative

No	Test	Criteria	Result
1	Chow (CEM and FEM)	• Value of Prob > F is greater than 0.05, choose CEM • Value of Prob > F is less than 0.05, choose FEM	0.0053
2	Hausman (FEM and REM)	• Value of Prob>chi2 is greater than 0.05, choose REM • Value of Prob>chi2 is less than 0.05, choose FEM	0.8642
3	LM (REM and CEM)	• Value of Prob > chibar2 is greater than 0.05, choose REM • Value of Prob > chibar2 is less than 0.05, choose CEM	0.0104

Source: Secondary Data (proccesed), 2022

CEM was selected based on the Chow test, Hausman test, and LM test. The common effect model uses the Ordinary Least Square (OLS) method to estimate the independent variable's effect on the dependent. The data used first goes through the

classical assumption test to ensure BLUE (Best Linear Unbiased Estimator). The tests consisted of normality, multicollinearity, autocorrelation, and heteroscedasticity. Normality was carried out using the Shapiro-Wilk test; meanwhile, the Mulollinearity uses the Variance Inflation Floor (VIF) value. The presence or absence of autocorrelation was concluded through a run test. Meanwhile, heteroscedasticity is known using the Breusch-Pagan test.

Tabel 2. Result of Normality, Multikolinearity, Autocorrelation, and Heteroscedasticity Test

No	Test	Criteria	Result	Decision
1	Normality	• If the value of Prob>z is less than 0.05, then the residual does not distribute normally residual berdistribusi tidak normal (Shapiro-Wilk test)	0.26	Residual is distributed normally
2	Multikolinearity	• If the VIF score of independent variable is more than 10, then there is a multicolinearity	• VIF X1 = 1.15 • VIF X2 = 1.11 • VIF X3 = 1.04	No multicolinearity
3	Autocorrelation	• If Prob>|z| is less than 0.05, then there is an autocorrelation (run test)	0.67	No autocorrelation
4	Heteroscedasticity	• If Prob > chi2 is less than 0.05, then there is a heteroscedasticity (Breusch-Pagan test)	0.27	No heteroscedasticity

Source: Secondary Data (proccesed), 2022

Table 2 shows that to realize an estimator that meets BLUE, only three independent variables are used from 4 (equation (1). This condition is because the total asset variable (X4) strongly correlates with the capital variable itself. (X2). Then, in line with efforts to fulfill the BLUE requirements in the OLS method, a semi-log model was chosen (the independent variable was transformed by a natural logarithm, while the independent variable was not) (Gujarati, 2003). Thus, equation (1) was converted into equation (2).

$$LnY_{it} = \beta_0 + \beta_1X_{1it} + \beta_2X_{2it} + \beta_3X_{3it} + e_{it} \qquad (2)$$

Where : LnY = Natural logarithm of village unit cooperative's remaining income

RESULT AND DISCCUSION
Number of Members, Internal Capital, External Capital, and Remaining Income

Members play a strategic role in managing cooperatives, including village unit cooperatives. However, from 2019 to 2022, the number of village unit cooperative members in Sleman Regency tends to decrease. This portrait is inversely proportional to the dynamics that occur in cooperatives at the national level. The causes of the decline in the number of members include: ease of leaving (Kisley, 2015), changing residence, death and membership is not passed on by family or heirs (Syaiful et al., 2016), and does not want to continue the provisions of cooperation in between cooperatives and members (Henrisken et al., 2012). For all of these reasons, all capital provided by members (mandatory savings and principal savings), will be returned by the cooperative (Nilsson et al., 2012). Meanwhile, according to Hakelius et al. (2013), another consideration for leaving a cooperative is to form a new cooperative. Furthermore, in general there are other reasons, namely being dismissed by the cooperative manager, due to not carrying out their obligations as members (Sinaga & Kusumantoro, 2015). However, this provision is rarely practiced in village unit cooperatives in Sleman Regency. Of the total 17 cooperative units, only 4 units experienced an increase or decrease in the number of members in the last three years. Meanwhile, the other 14 units remained unchanged. In practice, there are members who do not carry out their obligations in paying mandatory savings every month or contribute or actively participate in organizational or business development. Even so, village unit cooperative managers tend to choose to continue to give advice, rather than terminate the membership status.

Internal capital consists of several components, including principal savings, mandatory savings, donated capital, grants, cooperative reserves, capital accumulation reserves, and the remaining operating results in the current year. From 2019 to 2022, the amount of own capital of village unit cooperatives is relatively stable, in the range of 12.3 billion rupiah. Among the set of components, the majority are capital reserves. This condition is in line with the provisions of Law No. 12 concerning Cooperatives, regarding the priority of allocation of funds from the rest of the business, namely reserves. According to Tkacz et al. (2015), reserve funds can also come from member contributions. Thus, the greater the number of members, the greater the funds that can be allocated to the reserve fund.

Then, in this study, what is meant by external capital is all funds that are in the cooperative, but it is an obligation. Voluntary savings, even though they come from members, are recorded as obligations, because the members can withdraw them at any time, and the cooperative is obliged to return them. Other components of external capital include debts to banks, debts to members, and accrued expenses. Among all these components, debt to banks holds the largest contribution.
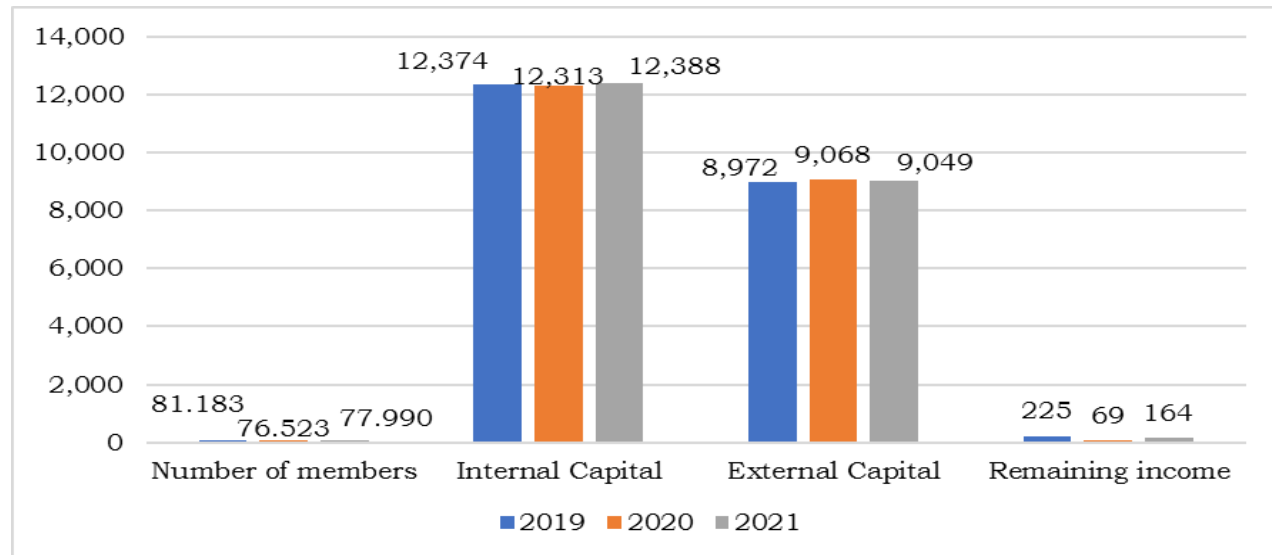
Figure 1. Number of Members (thousand people), Internal Capital (million rupiahs), External Capital (million rupiahs), and Remaining Income (million rupiahs) of Village Unit Cooperative, 2019 – 2021

The remaining income of the cooperative's from 2019 to 2020 fell drastically, by more than 50 percent. This condition is mainly due to the Covid-19 pandemic and the enactment of social restrictions. The business activities of village unit cooperatives are like other types of cooperatives, as well as other business entities (Tambunan, 2021; Sulistiowati & Kanto, 2022), which are increasingly limited and at the same time the number of transactions from members/customers decreases. Among 17 village unit cooperatives in Sleman Regency, four of them are recorded to have lower income than expenditure, so that the remaining income are in a deficit.

Factors Impacting the Remaining Income

The coefficient of determination (adjusted R-squared) of about 0.53 (Table 3) means that the independent variable used can explain the variation in the value of the dependent variable by 53%, while other variables outside the model explain 47%. Furthermore, based on the F test, it can be concluded that all independent variables simultaneously affect the endogenous variable (Prob(F-statistic < 0.0000). Then, based on the partial test, only two variables have a significant effect.

X2, or internal capital, has a probability value of 0.000 or less than the 5% confidence level. That is, internal capital has a significant effect on the remaining operating results. The coefficient value of 0.01114 means that for every increase in one unit of own capital, ceteris paribus, the remaining income will increase by approximately 0.0114. This study's results align with Winarko (2014) and Rohmansyah & Sudarijati (2017). Based on the findings of this study and previous literature, the obligation of village unit cooperatives to strengthen their internal capital, especially the allocation of reserve funds from the remaining income, must be a priority. Then, village

unit cooperatives can encourage members to always pay mandatory savings as one component to support the stability of their internal capital. Furthermore, to complement these efforts, members must be reminded that the greater the contribution to the cooperative's and business capital, the greater the profit sharing. This suggestion can also be found in Rantau's (2002) research which concludes that member participation has a positive effect on the success of cooperatives. Furthermore, through a series of efforts, both the owners and users of the cooperative, as well as the organization itself, both benefit.

Table 3. Result of Regression Analysis of Factors Impacting the Remaining Income of Village Unit Cooperative

Variable	Coefficient	Standard error	t-test	Probability
C (*intercept*)	-2,679,032	4,019,577	-0.67	0.508 ns
X_1	-158.7811	649.3688	-0.24	0.808 ns
X_2	0.0114	0.0018	6.30	0.000***
X_3	0.0079	0.0037	2.13	0.038**
R-squared			0.56	
Adjusted R-squared			0.53	
F-statistic			19.59	
Prob(F-statistic)			0.0000	

Source: Secondary Data (proccesed), 2022
Notes: ** = p <0.05 and *** = p < 0.01

External capital, or X3 has a significant and positive effect on the remaining operating results, as shown by the probability value of 0.038 and a coefficient of about 0.007. In other words, the greater the external capital owned by the village unit cooperative, the higher the residual income will be. The results of this study differ from those of Aziar et al. (2012). They found that loan capital had a negative effect on the remaining income and advised cooperative managers to pay attention to increasing loan capital because it has the consequence of increasing the financial burden. In line with the proposal, although external capital has a positive effect on the remaining income in this study, cooperative managers must always apply the principle of caution in applying external capital. Any additional obligations must be utilized for productive activities.

CONCLUSION

In general, the number of members of village unit cooperatives has decreased. However, when viewed in each unit, village unit cooperatives in Sleman Regency are dominated by stagnant membership (not increasing and not decreasing). Then, amid the Covid-19 pandemic, the ability of village unit cooperatives to increase their internal capital decreased, but the acquisition of external capital increased. Reflecting that village unit cooperatives apply for additional or new loans to maintain business and organizational continuity. Furthermore, the remaining income fell during the

pandemic, and several village unit cooperatives recorded a deficit. Finally, only internal and external capital has a significant and equally positive effect among all exogenous variables. Thus, the greater the internal capital as well as the external capital, the greater the remaining income.

RECOMMENDATION

This study has a weakness: not using the age of the board/manager, the experience of the board/manager, and the level of education of the board/manager in the estimation of the amount of the remaining operating results. These three parameters play a strategic role because the board/manager is the executor of the cooperative's work plan. In addition, other variables can be used for further research, namely the availability of business units. Cooperatives with only one business unit and various business units will have different opportunities and challenges, and these conditions affect the remaining business results that will be generated.

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REFERENCES

Awoke, H. M. (2021). Member commitment in agricultural cooperatives: Evidence from Ethiopia. Cogent Business & Management, 8(1), 1968730. https://doi:10.1080/23311975.2021.1968730

Aziar, A., Malik, A., & Fitri, Y. (2012). Analsis Determinasi Modal Terhadap Sisa Hasil Usaha Koperasi Unit Desa Di Kabupaten Muaro Jambi. Jurnal Ilmiah Sosio-Ekonomika Bisnis, 15(1). https://doi.org/10.22437/jiseb.v15i1.2740

Baltagi, B. H. (2005). Econometric analysis of panel data (3rd ed.). New York: John Wiley & Sons.

Barreiros, R. F., Protil, R. M., Moreira, V. R., & Duclós, L. C. (2021). Social Advancement as a Critical Success Factor in a Model of Translation and Control of Strategy in Agro-Industrial Cooperatives. In Integrating Social Responsibility and Sustainable Development (pp. 19-42). Springer, Cham.

BPS Daerah Istimewa Yogyakarta. (2022). Daerah Istimewa Yogyakarta dalam Angka 2022. Badan Pusat Statistik, Daerah Istimewa Yogyakarta

BPS Kabupaten Sleman. (2022). Kabupaten Sleman dalam Angka 2022. Badan Pusat Statistik, Kabupaten Sleman

Fairbairn, B., (1994), The Meaning of Rochdale: The Rochdale Pioneers and the Cooperative Principles, Occasional Paper Series, Centre for the Study of Co-operatives, University of Saskatchewan, Canada.

Gujarati, D. N. (2003). Basic Econometrics fourth edition McGraw-Hill. New York.

Hakelius, K., Karantininis, K., Feng, L. (2013). The Resilience of the Cooperative Form: Cooperative Beehiving by Swedish Cooperatives. In: Ehrmann, T., Windsperger, J., Cliquet, G., Hendrikse, G. (eds) Network Governance. Contributions to Management Science. Physica, Berlin, Heidelberg. https://doi.org/10.1007/978-3-7908-2867-2_8

Henriksen, I., Hviid, M., & Sharp, P. (2012). Law and peace: contracts and the success of the Danish dairy cooperatives. The Journal of Economic History, 72(1), 197-224. https://doi:10.1017/S0022050711002488

ICA. (2022). Cooperative identity, values & principles. https://www.ica.coop/en/cooperatives/cooperative-identity. Diakses pada tanggal 08 Oktober 2022

Kementerian Koperasi dan UKM Republik Indonesia. (2019). Koperasi Pangan. Unpublished

Kementerian Koperasi dan UKM Republik Indonesia. (2022). Data Koperasi. https://kemenkopukm.go.id/data-koperasi/?an6eeYrObtO2ykFxYRRQXcBuWVcU191UE0U3NKPBrepl3JJnvA. Diakses pada tanggal 12 Oktober 2022.

Kislev, Y. (2015). Agricultural cooperatives in Israel: Past and present. In Agricultural Transition in Post-Soviet Europe and Central Asia after 20 Years, pp. 281-302

Kumkit, T., Gan, C., Anh, D. L. T., & Hu, B. (2022). Enhancing governance practice for better performance of credit union cooperatives in Thailand. International Social Science Journal. https://doi.org/10.1111/issj.12366

Kurniawan, A., & Yulhendri, Y. (2020). Pengaruh Jumlah Anggota, Modal Sendiri dan Modal Pinjaman Terhadap Sisa Hasil Usah (SHU) Koperasi Unit Desa (KUD) Dikabupaten/Kota Provinsi Sumatera Barat. Jurnal Ecogen, 3(2), 299-311. http://dx.doi.org/10.24036/jmpe.v3i2.8956

Nilsson, J., Svendsen, G. L., & Svendsen, G. T. (2012). Are large and complex agricultural cooperatives losing their social capital?. Agribusiness, 28(2), 187-204. https://doi.org/10.1002/agr.21285

Pemerintah Indonesia. 1992. Undang-Undang No. 25 Tahun 1992 tentang Perkoperasian. Lembaran Negara RI Tahun 1992, No. 116. Sekretariat Negara. Jakarta.

Pencavel, J. (2020), "The performance of consumers' cooperatives in America", Journal of Participation and Employee Ownership, Vol. 3 No. 1, pp. 1-27. https://doi.org/10.1108/JPEO-07-2020-0019

Putri, S. A., & Yulhendri, Y. (2019). Pengaruh Jumlah Anggota dan Modal Sendiri Terhadap Sisa Hasil Usaha Koperasi Unit Desa di Kota Padang. Jurnal Ecogen, 2(3), 542-552. http://dx.doi.org/10.24036/jmpe.v2i3.7446

Rantau, K. (2002). Pengaruh Partisipasi Anggota, Kualitas Pengelola, Kualitas Pengurus, dan Peranan Pemerintah terhadap Keberhasilan Usaha Koperasi (Kasus KUD di Kabupaten Buleleng Bali). SOCA: Jurnal Sosial Ekonomi Pertanian.

Ridley-Duff, R., & Bull, M. (2019). Solidarity co-operatives: The (hidden) origins of communitarian pluralism in the UK social enterprise movement. Social Enterprise Journal, 15(2), 243–263. https://doi.org/10.1108/SEJ-12-2018-0078

Rohmansyah, T., & Sudarijati, S. (2017). Pengaruh modal sendiri dan modal pinjaman terhadap sisa hasil usaha (SHU) koperasi Kota Sukabumi. Jurnal Visionida, 3(2), 55-67. https://doi.org/10.30997/jvs.v3i2.953

Saleh, N. M., Mizan, M. F. A., Jamaludin, M. S., Abdullah, M., Hassan, M. S., Jaffar, R., & Shukor, Z. A. (2022). Defining Cooperative Member Activism: Evidence from Oil Palm Farmers' Cooperatives. Business Perspectives and Research, 0(0). https://doi.org/10.1177/22785337221077395

Saputra, R. M. I., & Triyono, A. (2020). Faktor-Faktor yang Mempengaruhi Kinerja Keuangan Usaha Koperasi (SHU) di Koperasi Unit Desa (KUD) Harapan Maju Desa Petaling Jaya Kecamatan Batang Cenaku Kabupaten Indragiri Hulu. J-MAS (Jurnal Manajemen dan Sains), 5(1), 64-68. http://dx.doi.org/10.33087/jmas.v5i1.150

Sinaga, A. O., & Kusumantoro, K. (2015). Pengaruh Kualitas Pelayanan, Kemampuan Manajerial Pengurus, Motivasi Anggota dan Citra Koperasi terhadap Kepuasan Anggota Koperasi Wahana Artha Nugraha. Dinamika Pendidikan, 10(1), 1-15. https://doi.org/10.15294/dp.v10i1.5072

Siregar, A. P., & Jamhari, J. (2013). Analisis Kelayakan Koperasi Unit Desa di Daerah Istimewa Yogyakarta. Agro Ekonomi, 24(2), 113-124. https://doi.org/10.22146/agroekonomi.17201

Siregar, A. P., Oktaviana, N., & Rahmantyo Tarsilohadi, E. (2020). The Development of Rice Field Area in Special Region of Yogyakarta. SOCA: Jurnal Sosial Ekonomi Pertanian, 14(3), 557 - 571. https://doi:10.24843/SOCA.2020.v14.i03.p16

Siregar, A. P., Rahmantyo Tarsilohadi, E., & Oktaviana, N. (2021). The Transformation of Agriculture, Forestry and Fisheries Sectors in the Indonesian Economy. SOCA: Jurnal Sosial Ekonomi Pertanian, 15(3), 518 - 530. https://doi:10.24843/SOCA.2021.v15.i03.p09

Sulistiowati, W., & Kanto, D. S. (2022). Studi Atas Pengaruh Modal Dan Pinjaman Terhadap Sisa Hasil Usaha (SHU) di Koperasi Karyawan Sucofindo. Ekonomica Sharia: Jurnal Pemikiran dan Pengembangan Ekonomi Syariah, 8(1), 83-100. https://doi.org/10.36908/esha.v8i1.536

Syaiful, M., Aedy, H., & Tamburaka, I. P. (2016). Strategi Koperasi dalam Meningkatkan Kesejahteraan Anggota. Jurnal Progres Ekonomi Pembangunan, 1(1), 210520. http://ojs.uho.ac.id/index.php/JPEP/article/view/874.

Tambunan, T. (2021). COVID-19 Pandemic Crisis and Its Impact on Cooperatives: A Case from Indonesia. http://dx.doi.org/10.2139/ssrn.3877133

Tkacz, M., Arando, S., & Pacut, A. (2015). Cooperative response to societal and market challenges–the motives and stages of development of Mondragon cooperative model. A Case Study. Ekonomia Społeczna, (2), 69-84. https://doi:10.15678/ES.2015.2.05

Winarko, S. P. (2014). Pengaruh modal sendiri, jumlah anggota dan aset terhadap sisa hasil usaha pada koperasi di kota kediri. Nusantara of Research: Jurnal Hasil-Hasil Penelitian Universitas Nusantara PGRI Kediri, 1(2). Volume 01 Nomor 2 Oktober 2014. ISSN. 2355-7249.