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The Effect of Number of Members, Own Capital, External Capital and Business Volume on the Residual Results of Cooperative Business in West Java Province 2018-2020

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Abstract

Cooperatives as an institution with member welfare are the main goal through the process of dividing the remaining operating results (SHU). This study will examine the resulting influence on aspects of cooperatives such as the number of members, owner's capital, external capital, and business volume on SHU. Cooperatives throughout West Java Province were selected as research subjects, with data acquisition using Time Series with Cross Sections in 26 cities/districts of West Java Province in 2018-2020. The quantitative method uses a descriptive approach and panel data regression analysis, which succeeded in finding that the number of members is partially positively related to the remaining operating results but has no significant effect. Owner's capital and business volume can positively and significantly affect the remaining operating results. Meanwhile, external capital creates a significant negative impact on SHU. In a simultaneous study, all independent variables significantly positively influenced the SHU.

1. INTRODUCTION

Cooperatives as jointly owned business entities have the principle of kinship, so they can develop an attitude of mutual cooperation. The kinship and spirit of mutual cooperation in cooperatives is a reflection of the Pancasila economic system. In its development, cooperatives have "Law Number 17 of 2012" which explains in it the principles of cooperatives, types of cooperatives, foundations, principles and objectives of cooperatives. The purpose of making cooperative laws is to regulate cooperatives so that they can run according to the principles and objectives, namely the welfare of members. Basically, the purpose of cooperatives is not much different from companies, namely obtaining profits for the welfare of its members (Raharja, 2012). Along with the development of the era of cooperatives also innovate. In its development there are several classifications of types of cooperatives in Indonesia.

The classification of cooperatives in Indonesia is based on the business sector in which there are: Cooperatives in the production sector, Cooperatives in the type of marketing business, Cooperatives for consumers, Cooperatives in the service sector and cooperatives with the type of savings and loan business. Then based on the type of commodity, there are: Cooperatives in the mining sector, Cooperatives with agricultural and livestock business types, Cooperatives in the industrial and craft sectors. Based on the area of work there are: primary cooperatives, secondary cooperatives and tertiary cooperatives. Each region in Indonesia has several types of cooperatives, depending on the needs of the people in different areas (Zain, 2015). But in general, in a cooperative there are the number of members, the amount of own capital, outside capital, business volume and the amount of remaining business results.

In the Cooperative Law No. 25 of 1992 , the remaining results of cooperative operations or known as SHU-K are a form of income from the entire business run by cooperatives in a period of 1 year which has been depreciated for payment of obligations by cooperatives such as loan funds and annual tax obligations. SHU must be set aside before being distributed to members as a cooperative reserve fund. Reserve funds will later be used to purchase cooperative assets and increase

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liquid cash which is useful for maintaining cooperative liquidity (Buchari, 2020). After setting aside for reserve funds, the nominal amount of SHU given to each member is assessed from the level of contribution to each cooperative business activity for one financial year. The division of the SHU has the aim of improving the lives of the members. Cooperatives that can manage the remaining business results well will give a positive image so that members continue to trust the cooperative. But of course, there are several factors that can affect business activities, especially in the nominal SHU allowance.

One factor that has the potential to contribute to SHU is the quantity of members from each cooperative. So in this study using the independent variable is the number of members. According to (Ayuk & Utama, 2013) there is a significant positive influence between the number of members and SHU in KSPs in Badung Bali as a whole. So that efforts that can be made to increase the number of SHU one of which is to increase the number of members in quantity, in addition to increasing the quality.

Another factor that might contribute to the SHU dependent variable is cooperative capital. Cooperative capital is an important factor for the operation of cooperative activities. Capital in cooperatives is divided into two parts, namely own capital or capital obtained from cooperative members, and outside capital obtained from bank loans or even the sale of bonds. Abdul Ghoni, Nurhayati (2022) found that SHU was positively and significantly influenced by cooperative capital in the study of cooperatives with Kamil people in Majalengka district which was caused by the interest expense on loan capital thereby reducing income which had a negative impact on SHU. This positive relationship indicates that if there is an increase in capital, it will increase the number of SHU by a certain amount.

Business volume is thought to have contributed to the influence on SHU of each cooperative. business volume is the total amount of profit generated by the cooperative within one period. According to Nuriasih & Yuliarmi (2020) the high number of SHU-K can be identified by the increasing volume of cooperative business. In a cooperative effort to achieve the goal of establishing a cooperative, namely the welfare of its members, consistency and discipline are needed from the management and members of the cooperative. So that in cooperative business activities can obtain maximum business volume. The results of the study (Mashitoh & Suryono, 2018) found that there was a significant positive effect between business volume and SHU.

Tabel.1

No	Keterangan	Satuan	Tahun		
			2018	2019	2020
1.	Jumlah koperasi aktif	Unit	11.021	12.631	13.688
2.	Jumlah Anggota	Orang	1.429.067	1.493.370	1.597.838
3.	Modal Sendiri	Rp	5.758.971.777.664	7.271.706.279.892	6.701.267.713.788
4.	Modal Luar	Rp	6.540.773.638.405	7.797.440.100.153	6.108.384.866.177
5.	Volume Usaha	Rp	12.266.556.456.420	13.686.477.465.347	12.832.236.704.063
6.	Sisa Hasil Usaha	Rp	546.624.208.618	603.597.859.307	579.252.169.544

Sumber: Publikasi Dinas Koperasi dan UKM Provinsi Jawa Barat 2021

Regarding the data above, this is a publication of the performance of cooperatives in West Java Province in 2018-2020. It is known that there has been an increase in the number of SHU-K in West Java Province every year. Welfare of members is the goal of the establishment of cooperatives, so to achieve its goals cooperatives must get the maximum residual business results. The data that has been presented in table 1 will be used by the researcher as the main data which will then be processed and analyzed to formulate the influence that will be studied on the research variables.

Therefore, the purpose of this study is to examine the level of influence created by the number of members (X1), own capital (X2), external capital (X3), and business volume (X4) on the remaining business results of cooperatives in West Java Province in 2018-2020. The final results in the research conducted are expected to be able to find out how much influence the four independent variables have on the remaining results of

operations (SHU) representing the dependent variable.

2. LITERATURE REVIEW

2.1 Remaining Results of Operations (SHU)

Income that will be distributed to members by calculating in one year the result of the difference between the total income and the burden of payment obligations of the cooperative is called the remaining operating results (SHU). In an effort to obtain maximum residual business results, good relations between members are needed and improve the performance of each member of the cooperative. If the remaining results of the business experience an increase, the cooperative's goals for the welfare of its members can be fulfilled. This is in line with the statement of Hidayati & Filianti, (2020) a cooperative is a business entity that does not prioritize profit but also prioritizes service to its members.

2.2 Number of Members

Cooperatives cannot be owned individually but owned by all cooperative members, this is stated in the Cooperative Law Number 17 of 2012 Article 26 Paragraph 1. This means that each member who has fulfilled his obligations has the right to benefit from cooperative business activities in the form of SHU. Meanwhile, as service users, members can contribute to the cooperative's business activities as a consumer, which later the level of contribution will be appreciated through SHU receipts. Cooperatives cannot stand if there are no members in them because cooperative capital also comes from the obligations of its members (Ismanto, 2020). Therefore, the obligation of a cooperative member is related to making payments for mandatory and principal savings so that the cooperative is able to carry out its goals for the welfare of its members.

2.3 Owner's equity

One form of cooperative capital comes from its members in the form of savings, grants, or reserves known as own capital. Deposits that must be paid by each member are classified into 2 types, namely mandatory savings and principal savings, which cannot be disbursed as long as they are still members of the cooperative (Winarko, 2014). In Law No. 17 of 2012, it states that cooperative capital must be utilized in creating member welfare, not leading to profit. Maximizing cooperative capital by allocating it to cooperative business activities effectively and efficiently in order to maximize SHU. In a cooperative business, of course, capital is an important factor for obtaining income, so that it can increase the number of SHU which aims to prosper the members.

2.4 Outside Capital

In its business activities, cooperatives require capital other than from members, namely from outside capital. It can be interpreted that external capital is a loan obtained from the results of borrowing funds from banks, and issuing bonds. Outside capital is needed when cooperatives experience a shortage of capital for business activities, so that funds are borrowed to be used as capital. However, loan funds made by cooperatives must generate interest so that it can affect cooperative income which has an impact on SHU. The results of research by Hidayati & Filianti (2020) explain that loan capital has a negative coefficient and has a significant effect on SHU.

2.5 Business Volume

Business volume is the overall income of the cooperative in the form of goods and services for one year. The size of the income earned by the cooperative will result in the acquisition of the total amount of SHU. Cooperative activities can be seen from the total business volume where the results of cooperative activities, all cooperative activities are recorded in financial books (Yuliastuti &

Susandya, 2018). So that the size of the business volume can affect the acquisition of cooperative SHU.

3. RESEARCH METHODS

Research conducted using quantitative methods with a descriptive approach. Sugiyono (2012) defines the quantitative method as research that utilizes data in the form of numbers which is then followed by activities to analyze statistically. The descriptive approach aims to explain briefly and in detail what happened to the object of Burhan's research (2013: 44). The research data is sourced from the publication of the Office of Cooperatives and UKM of West Java Province so that the form of the data is secondary data. Data processing in this study uses the Eviews10 application as a data processing tool . In the research conducted, the researcher chose the number of members, own capital, outside capital and the volume of business used to be the independent variables and cooperative SHU as the dependent variable. Then the researchers collected cooperative data in West Java Province in 2018-2020, the data was obtained from the Office of Cooperatives and SMEs of West Java Province.

Panel data will be used by researchers as a variable data processing technique in this study. Gujarati (2003) describes panel data as two types of data, namely cross-sectional data and time series data. Multiple linear regression analysis was chosen as the data analysis/testing technique. Sugiyono (2016) explains that this analysis is used for not only one independent variable. The number of members (X1), own capital (X2), outside capital (X3), and business volume (X4) represent the independent variables and the remaining results of operations (Y) as the dependent variable.

Panel data regression analysis, contains 3 estimation models, *CEM* , *FEM* and *REM* . These three models must be selected to be the ideal model by conducting the Chow and Hausman test. The next step is to carry out the classical assumption test which functions to determine whether the data that has been analyzed can be continued without causing data bias. Furthermore, the classical assumption test includes a multicollinearity test, heteroscedasticity test, and autocorrelation test.

4. RESULTS AND DISCUSSION

4.1 Research result

a. CEM Test Results

Table 2. CEM

Variabel	Coefficient	t-Statistic	Prob.
C	-1964.864	-1.355047	0.1794
Jumlah_Anggota	0.007152	0.230825	0.8181
Modal_Sendiri	0.000475	4.693886	0.0000
Modal_Luar	-1.500326	-0.018839	0.0450
Volume_Usaha	0.000271	7.027712	0.0000

Source: Data processed using *Eviews10*

Based on the estimation results of *the Common Effect Model* , it is known that the value of α = 0.05. The four independent variables tested, found 2 variables with the value of own capital creating a significant positive effect on business volume. While the variable number of members does not have an effect on SHU, loan capital has a negative coefficient but there is an indication of a significant influence on SHU.

b. Panel Data Regression Model Selection

1) Chow test

Table 3.1 Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	13.150788	(26,50)	0.0000
Cross-section Chi-square	166.781912	26	0.0000

Source: Data processed using Eviews10

The results of processing using the Chow model in the table above can be explained that the prob. Crosssection Chi-Square of 0.0000. It can be explained that the probability value is smaller at α = 0.05, so FEM is an ideal model.

2) Hausman test

Table 4. Hausman test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	33.108431	4	0.0000

Source: Data processed using Eviews10

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This test uses the Hausman model, it can be explained in the table that the random cross-section produces *a probability* of 0.000, which is not greater than a significance of 5%, so FEM is said to be an ideal model.

c. Classic assumption test

1) Heteroscedasticity Test

Table 3.2 Heteros Test

Variable	Coefficient	t-Statistic	Prob.
C	1932.335	2.157256	0.0358
Jumlah_Anggota	-0.004695	-0.514016	0.6095
Modal_Sendiri	1.33E-05	0.468066	0.6418
Modal_Luar	2.26E-05	0.964554	0.3394
Volume_Usaha	-1.68E-05	-0.896121	0.3745

Source: Data processed using Eviews10

The test results in table five above show and can be explained that the probability value of all variables is not less than 0.05, meaning that the existence of a problem is not found when the heteroscedasticity test is carried out. Furthermore, the results of the regression performed are shown in the next table.

2) Multicollinearity Test

Table 3.3 Multiko Test

Variable	Coefficient	t-Statistic	Prob.
C	1932.335	2.157256	0.0358
Jumlah_Anggota	-0.004695	-0.514016	0.6095
Modal_Sendiri	1.33E-05	0.468066	0.6418
Modal_Luar	2.26E-05	0.964554	0.3394
Volume_Usaha	-1.68E-05	-0.896121	0.3745

Source: Data processed using Eviews10

The results of the multicollinearity test on the four variables show a probability value that is less than 10, so that the research model does not experience symptoms of multicollinearity.

d. Partial T test

Table 3.4 Partial T Test

Variable	Coefficient	t-Statistic	Prob.
C	-1964.864	-1.355047	0.1794
Jumlah_Anggota	0.007152	0.230825	0.8181
Modal_Sendiri	0.000475	4.693886	0.0000
Modal_Luar	-1.50E-06	-0.018839	0.0450
Volume_Usaha	0.000271	7.027712	0.0000

Source: Data processed using Eviews10

The test results in the table above show that the number of members variable gets a positive regression coefficient of 0.007152 and the probability (0.81 > 0.05) is greater than the significance level, from these results it is stated that there is no effect of the number of members on SHU . The capital variable itself has a positive coefficient value of 0.000475 and a probability (0.00 <0.05) is obtained. This means that the SHU variable is positively and significantly influenced by own capital. A negative coefficient value of -1.50E-06 (-0.00000150) is obtained for external capital variables with a probability (0.04 <0.05). This means that the results of the analysis can explain the negative influence created by outside capital to SHU. Then the business volume variable has the ability to create a significant positive influence on SHU because the coefficient value is 0.000271 and the probability is more (0.00 <0.05).

e. Statistical Test f *(* Stimultaneous Test)

Table. 3.5 Statistical *Test* f

Prob(F-statistic)	0.000000

Source: Data processed with Eviews10

The results of the analysis carried out above on the F test table are known to have a calculated F probability value of 0.000. These results can be interpreted as a probability value F count 0.00 < α = 0.05 (0.00 < 0.05). It can be analyzed that at a significance level of 5% all independent variables simultaneously have an effect on SHU-K in West Java Province.

f. Coefficient of Determination (R^2)

The results of data analysis carried out by the authors prove that the influence between the independent variables is large when associated with the dependent variable. It can be proven by the value of the coefficient of determination (R-Squared) showing a number of 0.857972. The results of the analysis can be analyzed that 85.79 of the research variables are able to explain the effect on SHU, while the rest are influenced by variables outside the research.

4.2 Research Discussion

a. The Effect of Number of Members on SHU

The data obtained from the analysis found a positive relationship from the variable number of members (X1) to cooperative SHU

in West Java Province in 2018-2020 even though there was no significant effect. This is because the resulting coefficient is 0.007152 but the probability shows a higher number than the significance of 0.05. That is, there is a close relationship between the two variables where, if there is an increase in the number of members, it can increase the SHU of the cooperative by 0.007152.

This is in line with Sudaryanti (2017) which states that increasing the number of cooperative members that are not accompanied by active contributions to cooperative business activities will not increase cooperative income. Thus, the increase in the number of members is not always directly proportional to the income of the cooperative which is a component measurement error in the calculation of cooperative SHU.

b. Effect of Own Capital on SHU

Judging from the data testing, it was found that the variable equity (X2) in 2018-2020 in cooperatives in West Java Province had an influence with a positive and significant relationship to the dependent variable SHU (Y). Evidence from these findings is identified based on a probability value of 0.00 and a variable coefficient of 0.000475. In this result it is known that if there is an increase in own capital by 1% there will be an increase of 0.000475.

This finding is in line with Bustani & Firdaus (2020) which states that cooperative SHU is positively and significantly influenced by own capital. Capital is an important cooperative instrument because it is used in the implementation of all forms of business activities. This business will require its own capital by recruiting new members, which will affect the number of SHU cooperatives.

c. The Effect of Outside Capital on SHU

From the calculation results, this study found that the external capital variable (X3) in 2018-2020 in cooperatives in West Java Province had a significant effect with a negative relationship on SHU (Y). It can be shown by the results on the coefficient value of -1.50E-06 (-0.00000150) with a significance value of 0.04 (0.04 <0.05) for the remaining business results. These results are in accordance with Susanty & Santoso (2022) with a coefficient value of -.2514 and a significance value of 0.01 <0.05. Cooperatives need outside capital which is used as additional capital for business activities. The remaining business results depend on the operational activities carried out by each cooperative. On the other hand, improving cooperative operational activities must pay attention to financial health and the effective use of capital. Thus, the high external capital (loans) entering the cooperative will be able to develop cooperative business activities which will later increase the SHU value (Mashitoh & Suryono, 2018).

d. Effect of Business Volume on SHU

Based on the results of the tests carried out, found a significant positive effect of business volume (X4) on SHU (Y) in 2018-2020 in West Java Province cooperatives. This can be proven by obtaining a probability value of less than 5% significance (0.00) with a coefficient of 0.000271. That is, if there is an increase in business volume, it will also increase the acceptable cooperative SHU.

The findings in this study are in line with Yadani et al., (2020) where a positive and significant effect was found from the volume of business to cooperative SHU. This condition indicates that the cooperative business volume and SHU have a simultaneous impact, that is, if it is increased, other variables can also increase. Conversely, if the volume of cooperative business in West Java Province decreases, then the remaining operating results also decrease. Cooperatives can increase the volume of business by adding types of businesses that are in accordance with the surrounding conditions with the aim of increasing the acquisition of SHU to be

received, so that the goal of welfare for members can be achieved by cooperatives.

5. CLOSING

5.1 Conclusion

The results of the study found several conclusions that the number of members, business volume, and own capital have a positive influence value on SHU. Meanwhile, outside capital creates a negative and significant effect on SHU.

5.2 Suggestion

From this statement, the researcher suggests that cooperatives in West Java Province in an effort to increase SHU cooperatives need to maximize the role of members to actively contribute to business activities and not just increase the number of members. In addition, performing upgrades on owner's equity will support supporting cooperative business activities is very important, but it needs to be controlled both borrowing and capital management, so that there are no problems, especially loan capital, so that it does not reduce the impact the rest of the results business. As well as the use of social media to carry out promotions as an effort to attract people to become cooperative members.

BIBLIOGRAPHY

Law Number 17 of 2012 Concerning Cooperatives (accessed February 25, 2022) https://peraturan.bpk.go.id/Home/Details/39094/uu-no-17-tahun-2012

Office of Cooperatives and Small and Medium Enterprises of West Java Province http://diskuk.jabarprov.go.id/

Abdul Ghoni, Nurhayati, P. (2022). Indonesian Impression Journal (JII). *Indonesian Journal of Impressions* , *1* (1), 1–6. https://doi.org/10.36418/jii.v1i3.39.Neni

Ayuk, NMT, & Utama, STI (2013). The Effect of Number of Members, Total Savings, Total Loans and Total Working Capital on the Remaining Results of Operations (SHU) of Savings and Loans Cooperatives (KSP) in Badung Regency, Bali Province. *E-Journal of Economics and Business, Udayana University* , *2* (9), 629–646.

Buchari, I. (2020). The Effect of Number of Members and Business Volume on the Remaining Results of Cooperative Operations in Eastern Indonesia. *Management and Sustainable Development Journal* , *2* (2), 69–86. https://doi.org/10.46229/msdj.v2i2.159

Bustani, B., & Firdaus, F. (2020). The Effect of Own Capital and Business Volume on the Remaining Results of Operations (SHU) in the Siti Khadijah Employee Cooperative Banjarmasin Islamic Hospital. *Maksipreneur Journal: Management, Cooperatives, and Entrepreneurship* , *10* (1), 31. https://doi.org/10.30588/jmp.v10i1.647

Hidayati, AN, & Filianti, D. (2020). Factors Affecting Remaining Results of Operations (Shu) in Sharia Cooperatives in Surabaya in the 2014-2018 Period. *Journal of Islamic Economics Theory and Applied* , *6* (9), 1862. https://doi.org/10.20473/vol6iss20199pp1862-1876

Ismanto, D. (2020). The Effect of Own Capital, Total Assets, Business Volume and Number of Members on the Remaining Results of Operations (Shu) in Cooperatives in the City of Yogyakarta. *Journal of Science, Socio Humanities* , *4* (1), 113–119. https://doi.org/10.22437/jssh.v4i1.9775

Mashitoh, G., & Suryono, B. (2018). Influence of Number of Members, Outside Capital, Own Capital And. *Journal of Accounting Science and Research* , *Volume 7,* .

Nuriasih, N. Ketut, & Yuliarmi, NN (2020). The Effect of Capital, Assets, Business Volume, and Number of Members on the Remaining Results of Operations in

Marketing Cooperatives. *Udayana University Development Economics* , *9* (3), 626–656.

Raharja, H. (2012). The Effect of Cooperative Size and Type of Cooperative on the Quality of Internal Control Systems (Case Study on Cooperatives in Semarang). *Diponegoro Journal of Accounting* , *1* (1), 546–554.

Sudaryanti, DS (2017). The Effect of Number of Members, External Capital, and Total Assets on Remaining Results of Operations (Empirical Study of Savings and Loans Cooperatives in Tasikmalaya City, 2016). *Ekspektra : Journal of Business and Management* , *1* (2), 156–172. https://doi.org/10.25139/ekt.v0i0.339

Sugiyono. (2012). *Quantitative Qualitative Research Methods and R&D* . Alphabet.

Susanty, RDA, & Santoso, RA (2022). The Effect of Own Capital, Loan Capital, Business Volume and Number of Members on the Remaining Results of Cooperative Businesses in Gresik Regency. *Masters: Journal of Applied Management and Business* , *02* (01), 27–40.

Winarko, SP (2014). The Effect of Own Capital, Number of Members and Assets on the Remaining Results of Operations in Cooperatives in the City of Kediri. *Nusantara Of Research* , *01* (02), 151–167.

Yadani, Y., Husna, HA, & Rikayana, HL (2020). The Influence of Capital, Business Volume, and Number of Members on the Remaining Results of Operations in Village Unit Cooperatives, Siantan District, Anambas Islands Regency in 2017-2019. *Student Online Journal (SOJ) UMRAH-Economy* , *01* (02), 389–397.

Yuliastuti, IAN, & Susandya, AAPGBA (2018). Factors Affecting the Remaining Results of Cooperative Operations in the City of Denpasar. *Pyramids* , *16* (1), 59–66.

Zain, MA (2015). Cooperative Legal Politics in Indonesia (Historical Juridical Review of Cooperative Arrangements in Indonesia). *Journal of Legal Research* , *2* (3), 160–177.