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The Mediating Role of Accountability in the Influence of Cooperative Characteristics on its Financial Performance

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Abstract: This study aims to analyze the role accountability as an intervening variable in the influence of cooperative characteristics on its financial performance. The study population is Koperasi Pegawai Republik Indonesia (KPRI) registered on the Office of Cooperatives and SMEs of Semarang Municipality. This study uses purposive sampling with 38 cooperatives that meet the criteria. The data are analyzed using regression analysis with path analysis and sobel test to determine the significance of intervening variable testing. The research results showed that in partial such variables as cooperatives size, cooperative age, and leverage have no influence onfinancial performance. The cooperative size and age has an influence on financial performance through the mediating role of accountability variable. However, the cooperative accountability variable sampling with 38 cooperatives that meet the criteria. The data are analyzed using regression analysis with path analysis and sobel test to determine the significance of cannot mediate the influence of leverage on financial performance.

Keywords: Accountability; Cooperative Size; Cooperative Age; Leverage; ROA.

I. INTRODUCTION

Employee Cooperative of the Republic of Indonesia or *Koperasi Pegawai Republik Indonesia* (KPRI) ought to be managed professionally in running its business activities.Such professional management requires a relevant and reliable accountability and information system. This is necessary in order for every business of the cooperative to ensure that the objectives of forming cooperative, namely to give satisfaction in fulfilling its members' needs and to develop a cooperative capable of independently funding its own business units and to improve the society life welfare, are accomplished. KPRI is expected to be able to improve its business with no fraud from any party, particularly from its management.

The number of primary cooperatives in Semarang Municipality is 990 with its varied types. 788 of them are active cooperatives and the other 202 are inactive. For KPRI cooperative type, out of a total of 105 cooperatives 91 of them are active and 14 are inactive. From the 91 active cooperatives, 14 cooperatives or 15.38% do not organize any RAT for 2014 (Office of Cooperative and Small and Medium-Sized Enterprises Kota Semarang). Based on the data above, the many inactive or bankrupt cooperatives are a proof that cooperative's financial performance has not been optimal.

Many factors may influence a company/cooperative's financial performance. According to Haat *et.al.* (2008) those factors which influence financial performanceare leverage*,* growth, company size, liquidity, and non-debt tax shield. Meanwhile according to Liargovas (2010) those factors include company size, current ratio, debt to equity, fixed asset to total asset ratio. Lee (2014) suggests that the number of board of commissioners and company age are those factors which can influence financial performance.

Cooperative size indicates an increase of assets in each cooperative. According to Parmono, a company size which is measured using the total assets will influence its financial performance as measured using ROA (Liargovas, 2013; Abor and Adjasi, 2007). A major company will obtain profit greater than its operation activities. In other words, an increase in company size could increase a company's profitability.

Any cooperation which has been established for a longer period would likely to be more experienced and usually has an excellent financial performance, is reputable, and thus has high profit marginwhen they perform their operation activities. Loderer and Urs (2010) in his study states that company age variable has some influence on its financial performance.

Leverage is the use of assets and fund source by the company which has fixed costs (fixed charge), meaning that the fund comes from loan since it has interest on it as a fixed charge intended to increase the potential profit to the principals (Solano and Pedro, 2007; Khafid, 2013).

Good Corporate Governance (GCG) is a way to govern a company by describing the relationship between stakeholders and company management in determining the company's direction and performance (Abor and Adjasi, 2007). One cause of a company/cooperative's poor financial performanceis conflict of agency. A management with certain interest will tend to prepare financial statements which is driven by their goal, rather than for the sake of its owners.That is why the principles of GCG needs to be implemented, particularly in terms of accountability.

Among several factors which influence a cooperative's performance as explained above, a cooperative's accountability is deemed as a strategic factor in influencing a cooperative's performance (Ricci et.al., 2009). The attention that the government pays on cooperative's accountability to improve the national-wide cooperative development profile is really high. The current government's momentum to improve cooperative's accountability is shown by issuing Regulation of Minister of Cooperatives and Small and Medium-Sized Enterprises Number 20 of 2015 concerning the Implementation of Cooperative's Accountability.

Accountability has been an issue the public has paid their attention to. Accountability implies that administrators at the end of the say should be held accountable for the services they give to the society. Accountability is defined as the embodiment of obligations to account for the successful or failed implementation of organization missions in achieving the predetermined goals and targets.The implementation of accountability could improve the company's relationship with its clients and to make its reputation and credibility better. SMEs should focus on the relationship between accountability level and their ability to influence the development process at both national and international scales, and are expected to get bigger with its own skills and competences (Ricci *et al.*, 2009).

This study aims at testing and analyzing the influence of cooperative characteristics (cooperative size, cooperative age, and leverage) and accountability on its financial performance. In addition, this research will also test and analyze the mediating role of accountability variable in the influence of those characteristics on cooperative's financial performance.

Cooperative size is measured using the total assets a cooperative owns. A big cooperative gets more attention from the society and, thus, they will be more cautious in making their financial statements. Solano and Teruel (2007) as well as Lee (2012) in their studies suggest that size positively and significantly influence return on assets (ROA). Therefore, hypothesis 1 of this research is stated as follows:

H1: Cooperative size positively and significantly influences financial performance

Any cooperative which has been established for a longer period of time will be more experienced and usually has excellent performance, is reputable and, hence, has the possibility of having high net income (SHU). Loderer and Urs (2010) suggest that company age influences company's financial performance. With more stable source of capital, any company lasted long enough will find it easier to market their products better since they have been known and their products are trusted by customers and, eventually, will gain large amount of profit as well. Hence, hypothesis 2 of this research is stated as follows:

H2: Cooperative age has positive and significant influence on financial performance

The high rate of debt will result in high financial risk to the company, and this will reduce the profitability percentage (ROA). On the contrary,when the amount of debt is low the company's financial risk will also be low, leading to an increase in profitability (Peni, 2011). The research conducted by Liargovas (2010) indicates that there is a correlation between leverage and measurement of an entity's performance. Therefore, hypothesis 3 of this research is stated as follows:

H3: Leverage has negative and significant influence on financial performance

Big-sized cooperatives require the implementation of accountability. This will make their members to trust even further to save their fund there and to apply for some loans and attracts new members and, in turn, results in the achievement of high financial performanceof the cooperative. The research performed by Abor and Adjasi (2007) finds that good corporate governance has positive influence onthe financial performance. Abbasi *et al.*, (2012), Vo and Thuy (2013) also find that GCG has some influence on company performance proxied with return on asset (ROA). Thus, hypothesis 4 of this research is stated as follows:

H4: Cooperative accountability has positive and significant influence on financial performance

The studies conducted by Lee (2012) suggest that company sizehas positive influence oncorporate governance quality. Bigger companies tend to attract and draw attention from external parties. In turn, it will drive the companies to apply a better corporate governance structure. Khancel (2007) find that good corporate governance principles which consist of transparency, accountability, responsibility, independence, and fairness, influence the financial performance.

For bigger cooperatives, the demand for information required by stakeholders will be increasingly higher. This leads to the necessity of high level of accountability. Any cooperative with high accountability will, then, present all information in detail, enabling their decision-makers and stakeholders to get sufficient information. Furthermore, the trust given to them from their fund depositors, members and creditors will also increase. As a result, the cooperative will be solid and its financial performance will improve.

Older cooperatives will earn trusts from the public thanks to their capability of surviving along with times. Consequently, their future members or stakeholders will be interested in investing in it or saving their money with the cooperatives. These higher level of trust and attractedness of future members will drive the cooperatives to keep applying GCG principles. Khancel (2007) in their research find that the practice of corporate governance help reduce conflict of interest between business owners and management.

Zhang and Thiam (2014) in their research suggest that leverage has positive influence on the quality of corporate governance implementation. Ijeoma and Ezejiofor (2013) suggest that the corporate governance variable has some influence on a company's performance.A company's performance is mainly influenced directly by corporate governance mechanism. In reference to agency theory, principal will surely expect that they will gain something in return for the money they save with the cooperatives as a form of their investment in the form of dividend (SHU). The pressure from the principals will make the management better implement GCG principles, particularly accountability. Therefore, hypotheses 5, 6, and 7 of this research are stated as follows:

H5: Accountability mediates the influence of cooperative size on financial performance.

H6: Accountability mediates the influence of cooperative age on financial performance.

H7: Accountability mediates the influences of leverage on financial performance.

II. RESEARCH METHOD

The population in this research is KPRIs registered in Office of Cooperative and Small and Medium-Sized Enterprise and or / PKPRI of Semarang Municipality amounting to 105. The sample is taken using purposive samplingon the following criteria and requirements:

Table 1
Research Sample

No.	*Criteria*	*Number*
1.	Registered in Office of Cooperative and Small and Medium-Sized Enterprise of Semarang Municipality in 2016	105
2.	Inactive for the last three years	(18)
3.	No Member Annual Meeting has been held until March 2016	(41)
4.	No financial statements are prepared	(1)
5.	No RAT report is submitted to Office of Cooperative and Small and Medium-Sized Enterprise of Semarang Municipality	(7)
	Number of research samples	**38**

The table below presents the variable, operating definitions, and method of measuring dependent variables, intervening variable, and independent variable used in this research.

Table 2
Research Variables

No.	*Name of Variable*	*Operating Definition*	*Measurement*
1.	Financial Performance	Comparison of net profit to total aseets.	$ROA = \frac{Net\ Profit}{Total\ Assets}$
2.	Cooperative Accountability	Cooperative accountability is the cooperative management or administrator obligations to be held accountable for the proceedings they have achieved.	$Akun, Kop = \frac{X}{A} \times 100\%$
3.	Cooperative Size	Size of cooperatives as viewed from their total assets.	Size =Ln Total Assets
4.	Cooperative Age	Cooperative age indicates a cooperative's ability in its existence quality and its ability to compete and to survive amidst competition.	Year of establishment until year of research
5.	Leverage	The amount of debt used compared to equity or total assets.	$Leverage = \frac{\Sigma\ Debt}{\Sigma\ Assets}$

Source: Processed from many sources

The data are collected using documentation of report books of Annual Member Meeting (RAT) collected in Dinas Koperasi dan UMKM and or/ PKPRI for 2015. The analysis techniques used in this research consist of descriptive statistics, regression analysis using path analysis, and sobel test.

III. RESEARCH RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive analysis below depicts data concerning the minimum, maximum, mean and standard deviation values for each variable owned by the cooperatives under study.The result of descriptive statisticsis presented in Table 3.

Table 3
Result of Descriptive Statisticstest

	N	*Min*	*Max*	*Mean*	*Std. Deviation*
ROA	38	1.30	15.70	5.8522	3.87380
Accountability	38	32.50	60.00	45.5263	7.35577
Size	38	19.42	25.08	21.4730	1.47420
Age	38	7.00	26.00	17.7368	4.28501
Leverage	38	.00	84.10	40.5252	19.13773
Valid N (listwise)	38				

Source: Output of IBM SPSS Statistics 21, 2016

Based on Table 3.1., the mean value of Return on Asset (ROA) is 5.85%. The mean value of cooperative accountability is 45.53. The mean valueof cooperative sizeis 21.47. The mean value of cooperative age is 17.74. The mean valueof leverage is 40.53.The result of significance test of each variable is presented in Table 4.

Table 4
Result of Partial Test

	Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
		B	*Std. Error*	*Beta*		
1	(Constant)	18.598	9.998		1.860	.072
	LnAsset	-.945	.556	-.360	-1.701	.098
	Age	-.107	.163	-.119	-.658	.515
	Leverage	-.029	.038	-.145	-.774	.444
	Accountability	.234	.109	.444	2.144	.039

a. Dependent Variable: ROA

Source: Processed secondary data, 2016

Regression equation is structured as follows:

$Y = 18.598 - 0.945X_1 - 0.107X_2 - 0.029X_3 + 0.234Y_1 + e$

Based on the partial test, **Hypothesis 1 is rejected,** cooperative size does not have any influence on ROA, hence whether a cooperative is small or big in size which is proxied from total assets does not have any influence on ROA. **Hypothesis 2 is rejected,** meaning that the period of time a cooperative has been established could not influence any improvement of cooperative's ROA. **H3 is rejected,** leverage does not have any influence on ROA, and thus whether its leverage is high or low, it does not have any influence on the level of cooperative's ROA achievement. **H4 is accepted,** any cooperative with high level of accountability will be able to improve its performance as proxied with ROA.

To discover the role of accountability as an intervening variable in this research model, sobel test is used. This research uses sobel test with *Sobel Test Calculator for the Significance of Mediation* application from website *www.danielsoper.com.*

Based on the sobel test above, it is indicated that the mediating influence of cooperative accountability is significant in cooperative size and age on cooperative's financial performance, while the leverage is insignificant, as shown in the one-tailed probability column. **H5 is accepted,** inbig-sized cooperatives, when the accountability principles are applied, then it will improve their financial performance. **H6 is accepted,** any cooperative which has been established for a long time, when they apply cooperative accountability, will benefit from it in that its members' trust will increase in such a way that it can improve the cooperative's ROA. **H7 is rejected,** meaning that where the leverage is high or low, it does not influence the application of cooperative accountability thus it will not have any influence either on the improvement of cooperative's financial performance.The amount of determination coefficient is presented in Table 3.3.

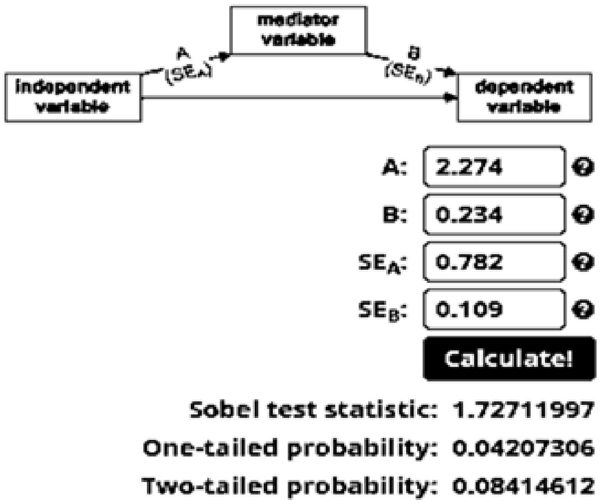

Figure 1: Sobel Test on Cooperative Size

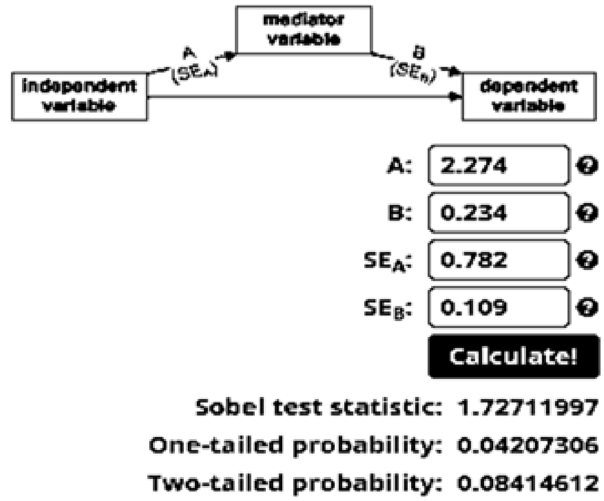

Figure 2: Sobel Test on Cooperative Age

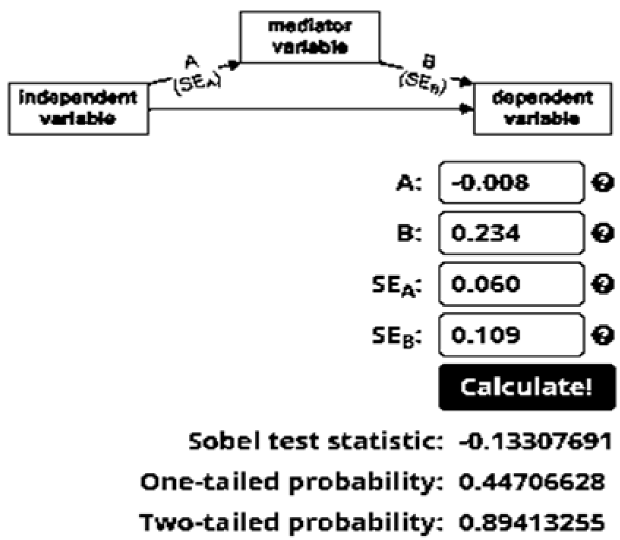

Figure 3: Sobel Test on Leverage

Table 5
Determination Coefficient

Model	R	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*
1	.433[a]	.188	.089	3.69690

a. Predictors: (Constant), Accountability, Leverage, Age, LnAsset

b. Dependent Variable: ROA

Source: Output of IBM SPSS Statistics, 2016

The value of adjusted R square is 0.089, indicating that 8.9% of the dependent variable variation could be explained by independent variable, while the remaining is explained by other variables beyond regression model.

Any cooperative with low total assets could earn high SHU if those assets are managed well. Therefore, the large amount of total assets owned by a cooperative is not a guarantee for the cooperative to have a sound financial performance. There are also these two functions which cause the management or administrators fail to focus on the cooperative management. As a consequence, the big total assets they own could not be used and managed well. Hence, the assets could not earn any SHU optimally. This indicates that there is an idle cashor some money is not employed. The use and management of assets are highly necessary through, among other things, seveal alternatives such as opening new businesses or diversifying the busineses to increase its SHU and there is also a need to seperate the functions of management and administrator. This result confirms

The length a cooperation is established cannot earn high SHU if no effort is made to improve the competence of its human resources (management, supervisors, and administrators). Changes in management, supervisors, and or administrators will bring about different impact in the achievement of cooperative's performance level. The new human resources of administrators will take different approach to the cooperative because of the different experience they might have compared to the former management, supervisors, and or administrators. In addition, the length a cooperation is established cannot be a reference for such cooperative to earn SHU at high level. This is because even though the cooperative has been established for a long time, yet no efforts are made to increase its SHU such as new business unit development, then it will lose to a newly-established cooperative with maximum attempt at earning its SHU. This research result is supported by Loderer and Waelchli (2010) who suggest that a company becomes inefficient along with time. The length of time a company has spent operating its business cannot be a benchmark of its financial performance.

A cooperation with its total assets financed by high liabilities will result in the increasingly higher charge or burden of interest payment on the loan it makes. The high interest charge paid will lead to the low amount of SHU earned by such cooperative. It happens because much of the cash is used to pay the loan. It is also caused by the fact that the cooperative is less optimal in distributing loan, resulting in less income while it also has to pay the interest on its debt.

Highly accountable cooperative will enable an easy access to information related to the cooperative itself for its members or future members. The information they obtain allow the members to be more involved in the cooperative by, for example, depositing their funds or applying for loans. As for future members of the cooperative, more information they obtain will allow them to enroll to be the cooperative members. The implementation of good corporate governancewill increase the members' participations and the number of existing members which, in turn, will lead to improvement of its financial performance.

Bigger cooperatives will have more demand for information from its stakeholders. This requires a higher accountability. Highly accountable cooperative will have this information presented in detail, enabling their decision-makers and stakeholders to get adequate information. In turn, the trust given to them from their fund depositors, members and creditors will also increase. As a result, the cooperative will be solid and its financial performancewill improve.

A long-standing cooperative is considered to be capable of managing itself thanks to its management system which has been running well. This is a result of fairly mature experience and learning so that they can survive in the midst of increasingly tight competition. Additionally, older/mature cooperativeswill earn trusts from the public, particularly their members and future members because they can survive along time. The implementation of cooperative accountabilitywill be able to convince members or future members about what the cooperatives can accomplish as long as they stand. Such trusts will make future members or stakeholders interested in making some investments, saving their money, and applying for loan to the cooperative. The implementation of these principles will lead to an increase in the cooperative's financial performance as a result of high interest income on the loans made by the cooperative members.

Any cooperative with either high or low level of leverage would not be pressured by the lender. This lender neither have any authority nor rights to control cooperatives like the case of companies in general. Whether or not the cooperative has the ability to pay its debts with the assets it owns, it does not influence the implementation of accountabilityas one principle of good corporate governance. Since cooperatives are joint business entity owned by their members, any decision is made fully by their members in their Annual Member Meeting. In relation to their loanees, even if the cooperatives implement cooperative accountability, it will not influence the increase of cooperative's financial performance achievement. Because the improvement of financial performance is fully performed by their human resources with no interference from either other parties nor creditors.

CONCLUSION

Based on the results of analysis and discussion, it could be concluded that, in partial sense, only cooperative accountability influences financial performance, while cooperative size, cooperative age, and leverage do not have any influence on financial performance. Cooperative accountability could mediate the influence of cooperative size and cooperative age on financial performance, yet cooperative accountability fails to mediate the influence of leverage on financial performance.

SUGGESTIONS

Dissemination of Decision of Minister of Cooperative and Small and Medium-Sized Enterprise Number 20 of 2015 concerning Implementation of Cooperative Accountability is highly necessary to be done to make cooperatives capable of presenting and applying the aspects which should be fulfilled and presented in RAT.

Several items set forth in Decision of Minister of Cooperative and Small and Medium-Sized Enterprise Number 20 of 2015 concerning Implementation of Cooperative Accountability should be compulsory items disclosed in every report of Cooperative RAT.

Research on the implementation of cooperative accountability could be focused on one of such aspects as organization and management, business and service, or finance.

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