

# Measuring Sustainable Competitive Advantage on Cooperative (Case Study: South Sumatera Cooperative)

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**Abstract.** This study aims to build a research model about increasing sustainable competitive advantage in cooperatives. The model built in this study was identified to determine the variables that most influence the improvement of sustainable competitive advantage. The unit of analysis in this study is the manager of cooperatives in South Sumatera with a sample of 250 cooperative managers. The analytical method used is a structural equation model with AMOS software. The results showed that valuable has the most influence in increasing sustainable competitive advantage and the next is rareness. The results of this study contribute to the body of science in particular there is a study of sustainability.

**Keywords:** Rareness, Valuable, Sustainable Competitive Advantage

## 1 Introduction

Sustainable competitive advantage is the goal of every business organization. The excellence of business organizations can be achieved through the creation of superior company performance (Porter, 1985) [18]. The excellence of sustainable business organizations can be driven by the rareness of an organization and the value of the business organization (Barney, 2002) [3].

The sustainable competitive advantage is still very interested to study. Previous research still contained inconclusive research results, in which several research results stated that the rareness of the company was able to create sustainable competitive advantage (Aaker, 1898; Barney, 2007) [1][5]. Besides that, there are research results that are contrary to this, among others (Carter & Carter, 2009; Pal, 2011) [6][13].

In south sumater, there are 6,272 cooperatives, but 1,598 cooperatives are closed because they are unable to compete. Based on data from the South Sumatera Cooperative Service, it shows that the distribution of cooperatives from the 17 biggest Regencies and Cities in Palembang is 1080 units, then Musi Rawas Regency is 730, and Muara Enim Regency is 479 units. While the smallest number of cooperatives are 109 units of Pagar Alam, Prabumulih Regency with 168 units, and Empat Lawang District with 187 units of cooperatives (Statistics, 2019) [24].

Anchors to The Theory of Growth of The Firm as stated by (Penrose, 1959) [14] and theory of competitive advantage (Peranginangin, 2015; Porter, 1985; Wang, 2014) [15][18][28]. This research builds a sustainable competitive advantage model that is driven by rareness and valuable. Considering the large number of cooperatives and their vital roles, this research is very interesting to be done.

## 2 Literature Review

### 2.1 Sustainable Competitive Advantage

The concept of sustainable competitive advantage is the goal of the organization to be able to stay competitive (Ma, 1999)[11]. In building sustainable competitive advantage the strategy used must be convergent (Setiyaningrum, & Peranginangin, 2018)[22]. Very dynamic competition conditions encourage organizations to always have continuous innovation to be able to stay afloat (Gomes & Romão, 2018)[9].

Sustainable competitive advantage is reflected by differentiation capability, cost leadership, superior resources, excellence reputation, and relational bonding (Setiawan, Rahardian, Novela, Utami, & Peranginangin, 2019; Srivastava, Franklin, & Martinette, 2013)[21][23]. Sustainable

competitive advantage is influenced by several factors including the rareness and valuable of an organization (Barney & Hesterly, 2015)[4].

## 2.2 Rareness

Rareness becomes very important for cooperative organizations because it will make it difficult for competitors to imitate what is done (Fahy, 2000)[8]. Rareness has dimensions of physical rareness, organizational rareness, human resource rareness, intellectual intelligence, and rareness ability (Peranginangin, 2018; Urbancova, 2013)[17][26].

Rareness is very influential on increasing sustainable competitive advantage (Vorhies & Morgan, 2006)[27]. Research conducted by Esper & Fugate & Sramek (2007)[7], prove that rareness is very influential in increasing sustainable competitive advantage. Other studies conducted by Sandberg & Abrahamsson (2011)[19], also very convincingly stated that rareness is very influential in increasing sustainable competitive advantage.

Based on the literature review above, the following hypotheses can be made:

**H1: The higher level of rareness the higher level of Sustainable Competitive Advantage**

## 2.3 Valuable

Valuable has two dimensions namely the structure dimension and the system dimension, where the structural dimension is the cooperative organizational structure and the system dimension is the cooperative processes and procedures in carrying out its operations (Gomes & Romão, 2018)[9]. Both dimensions must be in line together and simultaneously so that the balance of the organization is maintained well (Peranginangin & Kusumawardhani, 2018)[15].

Valuable has the following indicators; first is the value of human resources, then the organizational value, intellectual value, financial value, and the last is the value of resources. Research by Talaja (2012)[25], very influential on increasing sustainable competitive advantage. Research by (Marezani & Mashhadi, 2018)[12] shows that valuable is very influential in increasing sustainable competitive advantage.

Based on the literature review above, the following hypotheses can be made:

**H2: The higher level of valuable the higher the level of Sustainable Competitive Advantage**

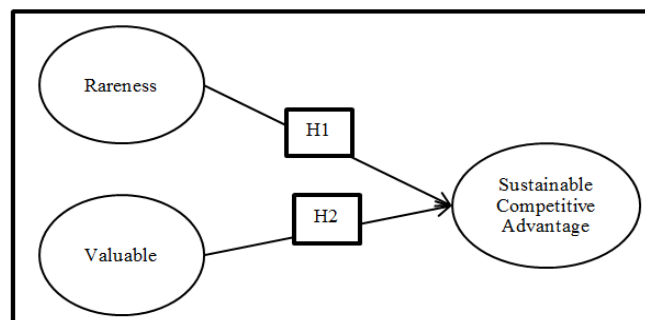


Figure 1. Proposed Model

## 3 Research Methodology

The object of this study is the population of cooperatives in South Sumatra, where the unit of analysis used is the manager of cooperatives with specified criteria (Sekaran & Bougie, 2016)[20]. This research was conducted by spreading structured questions using closed questions and open questions. In this study 250 questionnaires were distributed to respondents and 210 or 84% could be treated as a basis for this research.

The data in this study used structural equation models and processed using Amos software (Arbuckle, 2014)[2]. The validity and reliability of the data using construct reliability in this study convergent validity with cut-off  $\geq 0.50$  and construct reliability  $\geq 0.70$ , then it is used to measure the

suitability of the model conceptually and empirically uses a goodness of fit index, among which chi square is expected to be small, probability  $\geq 0.05$ , Gfi < AGFI, CFI, and TLI getting closer to one the better, the last is RMSEA (Hair, Black, Babin & Anderson, 2014)[10].

## 4 Result & Discussion

### 4.1 Validity and Reliabilities Testing

Validity test uses convergent validity by calculating the average validity extracted with a cut-off value  $\geq 0.50$  and construct reliability with a cut-off value  $\geq 0.70$ . The testing uses the results of the standardized loading factor from each indicator. The results of convergent validity and construct reliability testing are presented in the table below:

**Table 1.** Construct Reliability & Convergent Validity

No	Variable/Indicators	Std. Loading (Lamda Value)	Convergent Validity (AVE) $\geq 0.50$	Construct Reliability $\geq 0.70$
1	Rareness			
	R1	0.699		
	R2	0.602		
	R3	0.749	0.500	0.829
	R4	0.726		
2	Valuable			
	V1	0.690		
	V2	0.708		
	V3	0.887	0.588	0.866
	V4	0.915		
3	Sustainable Competitive Advantage			
	SCA1	0.715		
	SCA2	0.777		
	SCA3	0.854	0.615	0.888
	SCA4	0.808		
	SCA5	0.759		

Source: Developed for this study (2020)

The results in table above indicate that the variables rareness, valuable, and sustainable competitive advantage have very good loading factor. The results of convergent validity data show that the number for rareness is 0.50, for valuable is 0.588, and the sustainable competitive advantage variable is 0.615. Convergent validity shows the number exceeds the required one which is 0.50, it means that all indicators are reflection of the variables under study.

The results on the data construct reliability show that the rareness variable is 0.829, the valuable variable shows 0.866, and the sustainable competitive advantage variable shows 0.888. This reflects that all indicators in this study are reliable and reflect the studied data because it has exceeded the required number that is 0.70.

### 4.2 Goodness of Fit Index

Based on the results of the data processing using Amos software shows the chi-square value is 233,329 is good enough, probability is 0.001 is good enough, Cmin / DF value is 2.682, GFI is 0.850, AGFI is 0.793, CFI is 0.915, and TLI is 0.897 are good enough, so it can be concluded that there is a conceptual and empirical suitability of the model.

### 4.3 The Hipotesis Testing Results

The results of hypothesis testing in full model of structural equation model are presented in the figure below:

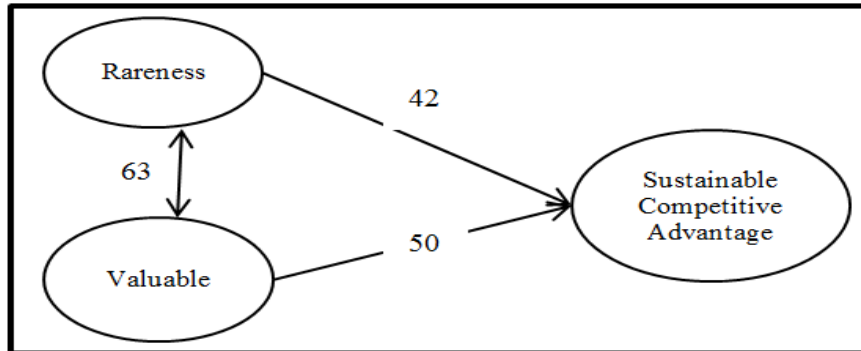


Figure 2. Structured Equation Model

The data results show the effect of rareness on sustainable competitive advantage with a CR value of 4.625 is accepted, the effect of valuable on sustainable competitive advantage with a CR value of 5.037 is accepted.

Table 2. Regression Weights Structural Equation Model

No	Hipotesis	Estimate	S.E	C.R	P	Result
1	Rareness → Sustainable Competitive Advantage	.362	.078	4.625	***	Accepted
2	Valuable → Sustainable Competitive Advantage	.602	.120	5.037	***	Accepted

Source: Developed for this study (2020)

Based on the results of Structural Equation Regression Weights Model 1 hypothesis which states that the higher level of rareness ensues the higher level of sustainable competitive advantage are proven to give a very significant effect. Hypothesis 2 which states that the higher level of valuable ensues the higher level of sustainable competitive advantage, it is proven very significant.

## 5 Conclusion

Valuable is a main key for developing sustainable competitive advantage. Furthermore, followed by company awareness, these two variables are very significant in increasing the sustainability of a cooperative's competitive advantage. Both of these variables can be built simultaneously so that the sustainability of a cooperative can always be maintained.

The results of this study greatly contribute to the existing knowledge. The results of this study can also be practically used as a reference in developing cooperatives. Future research also needs to add other variables so that the model of increasing sustainable competitive advantage becomes more comprehensive.

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