Improving Performance and Generating Competitive Advantage of Rural Banks: Do Coopetition and Capital Requirement Matter?

Harmani Harun[1], Rika Mulia[2], Muslim Abdul Djalil[3]
{harmani.jkt24@gmail.com[1] , rika.mulia@ar-raniry.ac.id[2], muslimadjalil@unsyiah.ac.id[3]}

Universitas Malahayati, Bandar Lampung[1], Faculty of Islamic Economics and Business, UIN Ar-Raniry[2], Faculty of Economics and Business, Universitas Syiah Kuala[3]

Abstract. The increasing of small, micro, and medium enterprises; large low-income communities are relatively unaffordable by commercial finance institutions, generating growth of microfinance institutions. Rural banks (*Bank Perkreditan Rakyat – BPRs)* have been serving those markets for years. This study analyzes coopetition leverage and capital requirement in determining their competitiveness and performance. The respondents were 280 employees in Aceh, Indonesia. The structural equation modelling analysis was used. There is a positive influence of the coopetition leverage and capital requirement towards competitive advantage and business performance. The study also found that the competitive advantage in mediating the effect of coopetition leverage and capital requirements on performance is said to be partial mediation. These findings suggest that BPRs could use the opportunity by building coopetition with the other banks or fintech companies and maximizing their capital to reach the competitive advantage for their sustainability, applying better-modified strategies to survive and improve performance.

Keywords: Rural bank, coopetition leverage, capital requirement, competitive advantage, business performance.

1 Introduction

Bangladeshi economist Muhammad Yunus received the Nobel Peace Prize in 2006 to eradicate poverty by using a financial institution (rural bank), Grameen Bank. This fact proves that banks can be an instrument to improve people's lives and increase activity or economic growth in a region [1]. Currently, small and medium industries need microfinance institutions, especially small and micro-entrepreneurs and low-income communities, which are relatively unaffordable by formal financial institutions.

This study will discuss one of the institutions providing financing for those groups, namely the Rural Bank (Bank Perkreditan Rakyat-BPRs). The number of BPRs in Indonesia is recorded at 1,545, consisting of 1,413 Conventional BPRs and 132 Sharia BPRs. According to the Law of the Republic of Indonesia No. 7 of 1992 about Banking as amended by Law no. 10 of 1998, it is stated that BPRs are banks that carry out business activities conventionally and or based on sharia principles which in their business activities do not provide services in payment traffic. BPRs in rural areas are targeted to spearhead financing the micro, small and medium enterprises. The distribution of commercial bank credit to them is still relatively low, and it is due to some

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reasons including, the high risk and limited information obtained regarding micro, small and medium enterprises [2].

Surviving in the financial service industry needs incredible strategies where the high level of competition comes from fellow BPRs and cooperatives, commercial banks, both government and privately owned and many other non-bank institutions that have openly entered micro banking. In addition to challenges, competition will also create many opportunities. The coopetition example is cooperation with commercial banks through linkage program, but the contribution towards total BPR credit is relatively small. That happens because of high excess liquidity in commercial banks. It is difficult for BPRs to charge low-interest rates to debtors because bank interest rates are very high [3].

Business strategy from the concept of coopetition is more directed at how a bank can create a sustainable competitive advantage by changing the rule of the game for its benefit. In order to improve competitiveness, Otoritas Jasa Keuangan has issued cooperation BPRs and a fintech peer-to-peer lending guidebook. The manual was launched virtually at the end of January 2021; they are no longer competitors but synergize to grow together by cooperating through two schemes, channelling and referral schemes [4]. Furthermore, the capital adequacy of BPRs in Aceh, the average CAR (Capital Adequacy Ratio) is still not optimal, which stands at only 8%, the lower threshold required by banking authorities.

Meanwhile, the COVID-19 pandemic is still a threat to our health and the economy at the moment; the financial services industry keeps struggling to cope with it. Still, BPRs managed to grow and contribute to the national economy despite facing the pressure of the Covid-19 pandemic and the squeeze of fintech. When general banking credit experienced a contraction in 2020, BPRs still recorded a positive growth of 1.82% year on year (YoY) to IDR110.7 trillion. BPRs Third Party Funds grew 3.53% from 2019 to IDR106.15 trillion, and assets rose 3.3% to IDR155.07 trillion [5]. However, the challenges faced will be more severe. BPRs must answer various challenges; increasingly fierce competition, increasingly rapid technological developments, changes in the ecosystem, digitalization, and strengthening capital. In addition, supporting adequate human resource infrastructure and implementing good governance, including industry consolidation, are essential [6].

2 Literature Review

2.1 Coopetition Leverage and Capital Requirement

Coopetition means collaborating with competitors for benefits that we cannot achieve on our own, including risk and cost-sharing, distribution channel sharing, co-marketing, and collaborative coopetition [7]. Coopetition usually evolves and shapes the competitiveness [8] thus well-positioned to gain a competitive advantage in various contexts [9]. Meanwhile, [10] studied why a firm decides to cooperate with competitors initiated and run continuously. Coopetition improves business performance, but the key is the number of links and obtained trust between pairs, mutual benefits, and commitments.

A high level of capital will increase cash reserves that can be used to expand credit so that a high level of solvency will open up more significant opportunities for banks to increase their profitability. It can even reduce public trust and adversely affect its business continuity if low solvency level [11]. According to Bank for International Settlements (BIS), the provisions and calculations of the Capital Adequacy Ratio (CAR) are formulated as "a minimum ratio of 8% of capital to assets that contain risks". CAR compares the net capital owned by a bank and its total assets, a ratio that mainly functions as a reservoir for the risk of losses that banks face in the future. The higher the CAR, the better the bank's ability to bear the risk of any risky

credit/productive assets [12]. Capital Adequacy Ratio, core capital, and supplementary capital are capital requirement indicators [13].

2.2 Competitive Advantage and Business Performance

Competitive advantage exists when there is harmony between competencies that distinguish a bank and have much better performance than its competitors [14]. The indicators of competitive advantage are product differentiation, cost, and market segmentation [15]. Competition is a way to encourage "the search for new combinations of resources, skills, and rental processes [16]." The influence of capital requirements on competitive advantage can be seen from several regulations, such as banks must maintain their CAR. The more adequate the funds they have, the more flexible management will be in carrying out the strategies of the institutions they lead through increasing their competitive advantage [17].

Performance is considered successful if the realization exceeds the set target. At the same time, the bank's performance measurement should use objective and subjective criteria such as the manager's perception and overall perception of stakeholders together [18]. A study proves the effect of coopetition on improving bank performance [19]. Business performance indicators accommodate customer needs, operating processes, service processes, and coopetition processes. Thus, it is affected by human resources and capital-related managerial factors [20].

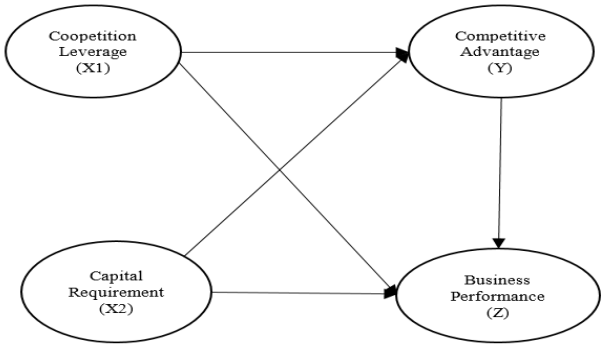

Fig. 1. The Proposed Research Model

3. Methodology and Data Analysis

The primary quantitative instrument of study was the application of the proportional random sample use method. This study was conducted for all BPRs in Aceh province, 15 banks with 49 branch offices. The total sample is 280 employees out of 934 employee's population. All variables were evaluated on a Likert scale of 1 to 5 (where 1 strongly disagree, 5 – strongly agree). The questionnaire aimed to identify the employee's statements towards the variables as contributors to the business process and the internal parties who know best about their own resources. In order to competitive advantages and business performance will sustain over time, the resources-based view theory suggests that understanding our resources and capabilities are crucial for establishing strategies [21]. The hypothesis testing is divided into two objectives: descriptive purposes and hypothesis testing. In the relationship between indicator variables, research variables, and measurement errors, the Structural Equation Modeling (SEM) approach is used. SEM can analyze measurement equations, structural equations, and reciprocal.

4. Research Result and Discussion

4.1 Respondent Characteristics

The total number of respondents is 280; male 173 (61.79%), female 107 (38.21%). The employees with the length of work between 5-10 years is 34.29 % (96), 3-5 years is 33.21% (93), less than two years is 24.64% (69), and more than 10 years is 7.86% (22). According to the education level, most respondents have a bachelor's degree as many as 170 employees (60.71%). Only four employees (1.43%) have a master's degree, while the rest of 37.86% have completed a diploma (106 employees).

4.2 Descriptive Analysis

The categorization of the number of respondents' response scores is based on the maximum score range and the minimum score divided by the number of categories desired[22]. This study used the range values as **Table 1.** below:

Table 1. Descriptive Category

Average Score	Category
4.20 – 5.00	Strongly Agree
3.40 – 4.19	Agree
2.60 – 3,39	Neutral
1.80 – 2.51	Disagree
1.00 – 1.79	Strongly Disagree

The descriptive analysis for each variable will be explained from Table 2. below:

Table 2. Descriptive Analysis Results

Variable	Mean	Std. Deviation
Coopetition Leverage	4.259	0.632
Capital_Requirement	4.202	0.636
Competitive_Advantage	4.239	0.613
Business_Performance	4.279	0.593

Overall, the respondents perceived the variables as favorable because the average value is 4.2, greater than 3.4 as the cut-off descriptive value representing the strongly agree category.

4.3 Confirmatory Factor Analysis Test

Confirmatory Factor Analysis test is used to reduce indicators on research variables. Refer to **Table 3**., those all existing indicators have exceeded the threshold of validity requirements, so they can be included in hypothesis testing through structural testing.

Table 3. Confirmatory Factor Analysis Test Results

Variable		Variable	Estimate
Coopetition1	<---	Coopetition	,904
Coopetition2	<---	Coopetition	,880
Coopetition3	<---	Coopetition	,739
Cap_Req1	<---	Capital_Requirement	,747
Cap_Req2	<---	Capital_Requirement	,501
Cap_Req3	<---	Capital_Requirement	,547
Com_Adv1	<---	Competitive_Advantage	,915
Com_Adv2	<---	Competitive_Advantage	,883
Com_Adv3	<---	Competitive_Advantage	,866
Bus_Per1	<---	Business_Performance	,783
Bus_Per2	<---	Business_Performance	,878
Bus_Per3	<---	Business_Performance	,929
Bus_Per4	<---	Business_Performance	,938

4.3 Verification of Hypothesis Testing

From the results of data processing using SEM, a structural equation model (full model) can be formulated as **Fig. 2**. below:

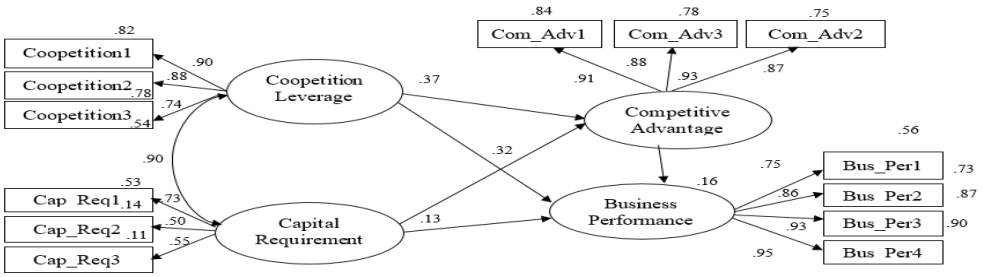

Fig. 2. Structural Model

The results of the structural test using the entire model can be seen in **Table 4.** below:

Table 4. Model Estimation Results

Dependent Variable (DV)		Independen Variabel (IV)	Beta	CR	P
Competitive_Advantage (Y)	<---	Coopetition Leverage(X1)	0.374	6.762	***
Competitive_Advantage (Y)	<---	Capital_Requirement (X2)	0.328	4.063	***
Business_Performance (Z)	<---	Competitive_Advantage (Y)	0.567	12.851	***
Business_Performance (Z)	<---	Coopetition Leverage(X1)	0.399	7.515	***
Business_Performance (Z)	<---	Capital_Requirement (X2)	0.134	1.972	0.046

Coopetition leverage affects competitive advantage due to the probability value is less than 0.05 (*** < 0.05) and the CR value is 6.762 (CR > 1.96). A positive estimation value of 0.374 means that the effect is positive; if coopetition leverage is high, the competitive advantage is also confirmed to increase. The results are consistent with the study that examines the effect of coopetition on the competitive advantage of SMEs in Turkey and the moderating effect of bank age [23]

Capital requirements also affect competitive advantage, the probability value is less than 0.05 (*** < 0.05) and the CR value is 4.063 (CR > 1.96). A positive estimation value of 0.328 means that the effect is positive. The results of this study are in line with research that examines the resource-based theory of competitive advantage, implications for strategy formulation in which one of the components is the financial capability of the bank [21].

Coopetition leverage has also influenced the business performance, the probability value is less than 0.05 (*** < 0.05) and the CR value is 7.515 (CR > 1.96). A positive estimation value of 0.399 means that the effect is positive. This study's results follow a study that examined the relationship between identifying and prioritizing critical success factors for coopetition strategy in Hong Kong [24].

The hypothesis that capital requirements affect business performance is also not rejected. This is because the probability value is less than 0.05 (*** < 0.05) and the CR value is 1.972 (CR > 1.96). A positive estimate value of 0.134 means that the effect is positive. The results are similar to a study that examined the influence between capital structure and performance of non-financial companies listed in the Nairobi Securities Exchange, Kenya [25].

There is also the influence between competitive advantage and business performance. The probability value is less than 0.05 (*** < 0.05) and the CR value is 12.851 (CR > 1.96). A positive estimation value of 0.567 means that the effect is positive. The results follow a previous study that emphasizes achieving and maintaining competitive advantage as an important strategic step in enabling superior bank performance [26].

4.4 Mediation Variable Hypothesis Testing

This study is also to determine the indirect effect of the mediating variable by using Sobel Test. The hypothesis is accepted if this calculation produces a z-value of 1.96 with a significance level of 0.05. First, the value of the influence of the competitive advantage variable in mediating the effect of coopetition leverage on business performance is positive at 0.212. The CR value is 2.4767 > 1.96.The value of the influence of the competitive advantage variable in mediating the effect of capital requirements on business performance is positive at 0.186. The CR value of 3.7052 > 1.96.

The findings of this study reveal that the coopetition leverage of BPRs is still low, so it seems that BPRs are managed by not utilizing maximum coopetition driving strategies, resulting in low competitiveness and performance BPRs. On the other hand, the capital requirement of BPRs in Aceh, the average CAR, is still able to meet the regulatory requirements around 8%.

However, the competitive advantage variable is the variable that has the most significant influence compared to other variables because its beta coefficient number is the largest (0.567). As part of the service industry, human resources with higher skills can be developed to promote competitive advantage and performance.

5. Implication and Suggestion for Future Research

The analysis results found that the competitive advantage factor was the most dominant in encouraging BPRS performance. BPRs need to systematically build sustainable competitive advantage by building core competencies, cooperating with superior competitors, and building a reputation to offer superior value to their customers, which will impact BPRs performance towards a better future. Coopetition is considered capable of encouraging BPRs to increase their innovation power, providing benefits knowledge creation, increasing market share so that it will be able to improve BPRS's competitiveness. The capital requirement also has a positive effect on BPRS performance.

Future studies should explore the effectiveness of the collaboration between rural banks and the other partner, such as from fintech industries and other commercial banks. The capital requirement for rural banks to perform better also should be highlighted as capital for microfinance institutions has a vital role for their long-lasting business. Suggestions for further research are expanding the object of research in BPRs, including other microfinance institutions, and adding other related variables.

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