BOARD OF DIRECTORS' FINANCE AND PLANNING COMPETENCY INFLUENCE ON CO-OPERATIVE'S FINANCIAL AND NON-FINANCIAL PERFORMANCES

***Nelson Lajuni[1], Mohd Pisah Ali[2], Yusman Yacob[3], Yusri Tarip[4]**
[1]University of Malaysia Sabah
[2,3,4]Co-operative Institute of Malaysia

ABSTRACT

Despite the financial and non-financial support by the federal government and perceived significant roles played by the co-operatives in the country's development, previous studies show that the performance of co-operatives has not been satisfactory. Thus, this study examines the influence of Board of Directors' finance and planning competency on co-operative's financial and non-financial performances. The data were collected via the distribution of 200 questionnaires but only 112 usable copies were subsequently collected. The data were then analyzed using PLS-SEM. The results reveal that co-operative's financial and non-financial performances are indeed influenced by Board of Directors' finance and planning competency. Implication and contribution of the study are discussed to justify the significance of this research.

Keywords: *Competency; Co-operative; Performance; PLS-SEM*

Corresponding author email: nlajuni@gmail.com

INTRODUCTION

Despite the high expectation of Malaysian government towards 8,000 co-operatives consisting of seven million members in Malaysia, social enterprises which includes co-operatives fail to contribute significantly to the economic growth (Malaysia Co-operative Societies Commission, 2010). Therefore, National Co-operatives Policy 2010-2020 was launched with the purpose of accelerating the performance of the co-operatives. This is to ensure that the co-operatives efficiencies especially on effective management, human capital development, consumer confidence, and effective governance can be upgraded. Moreover, the implementation of the "One Community, One Co-operative" program is government's testament and commitment to transform half of the adult population to be a member of a co-operative thus elevating their socioeconomic status indirectly through active participations in co-operative activities (Malaysia Co-operative Societies Commission, 2011a, b).

However, in order to sustain in a competitive market, co-operatives are demanded to be more creative and innovative in operating their business activities. Additionally, as part of its objectives in promoting the economic interest of its members, the co-operatives play an important role in the economy toward realizing the nation economic goals of becoming a high-income country by the year 2024 (The Edge Markets, 2018). However, weak performance of the co-operative sector has raised concerns about the factors affecting the co-operatives ability to overcome its shortcoming through effective policy implementation. Hence, this study is conducted with the intention to investigate the influence of Board of Directors' finance and planning competency on co-operative's financial and non-financial performances of co-operatives in Sabah, Malaysia.

LITERATURE REVIEW

In this study, Systems Theory is adopted to examine the board of directors' finance and planning competency effect on co-operatives' financial and non-financial performances.

The Systems Theory

The systems theory enlisted that competencies must be established to ensure the organization runs and functions effectively. Thus, it is fundamental to comprehend why competencies are vital for an organization and how skilled board individuals sway the organization. The systems theoretical framework can explain the contributions of competencies towards the entire organization (Jacobs, 1989). In fact, this theory has been examined in organizational development by many scholars in the past (Gradous, 1989; Boyatzis, 1982), with self-stabilization being a core principle of organization systems. Systems should be as steady as possible to manage internal and external unsettling influences. At the same time, skilled and

knowledgeable employees are increasingly ready to adjust to environmental changes inside the organization that prompts a progressively effective organization (White, 1959). According to Dubois and Prade (1996), systems theory approach that deals with competency building was a reasonable strategy to oversee performance and guide individual advancement. In addition, systems theory on competencies proposes that establishing the skills of the individual allows the entire organization to be more efficient and effective as individual shortcomings make the system unstable and unable to adapt to environmental influences, which eventually leads to ineffective system.

Finance and Planning Competency

Despite studies in the past have shown that formal strategic planning (e.g. staffing, budget and financing needs) enhances a firm's financial performance, a study by Pearce, Freeman, and Robinson (1987) concluded that the evidence is inconsistent and often contradictory. Miller and Cardinal (1994) seemed to put the issue to rest: they concluded that planning was found to be strongly and positively related to organization's financial performance. Nevertheless, it is important that the board members understand the budget process, but not to the extent that they are required to understand the technical budgeting and financial skills according to Fokken (2003). In this study, we concur that competency in finance and planning is indeed important for it is able to influence and contribute to organization performance financially and non-financially.

Financial Performance

Co-operative organisations are dissimilar from other investor-owned organizations especially its objective as it is founded not only for the purpose of steering business activities, but it is also used as a tool to promote economic interests among its members to increase their standard of living (LeVay, 1983). Therefore, co-operatives need to work harder to improve their performance to enable them in generating more profit so that members are benefited through income generation. However, in a study by Othman, Mansor, and Kari (2014) on the performance of co-operatives in Malaysia, the results revealed that co-operatives performance is relatively poor. Additionally, a study conducted by Pathak and Kumar (2008) discovered that co-operatives' members were not given sufficient training on financial management and have little understanding on its concepts resulting in poor performance among co-operatives in Fiji. This study suggested that Board of Directors' active participation through finance and planning could affect the performance of the co-operatives which suggests that the co-operatives could increase their efficiency by encouraging their Board of Directors to be involved in the decision-making process. However, the empirical examination of the roles of finance and planning competency towards financial performance in a co-operative framework is very limited and therefore this study plays a significant role to fill the gap.

Non-Financial Performance

The primary objective of co-operatives is not necessarily to generate profit. Therefore, it may be necessary to evaluate the performance of cooperatives using additional methods including valuation of non-financial benefits (Sexton & Iskow, 1993; Parliament, Lerman, & Fulton, 1990). If the board is unsuccessful in its monitoring and evaluation duties, principal-agent problems can arise that inhibit the cooperative's success (Staatz, 1983). Parliament, Lerman, and Fulton (1990); as well as Royer, Wissman, andKraenzle (1990); Babb and Boynton (1981); and Schradar, et al. (1985) have allused traditional or classical financial ratio analysis to evaluate individual and relative cooperative performance. However, Sexton and Iskow (1993) argue that ratio analysis may be biased and lack a solid foundation in economic theory when applied to cooperatives. Specifically, financial ratio analysis fails to consider that a cooperative is part of a vertically integrated entity that includes the membership and their businesses. As there are limited literature of the influences of finance and planning competency towards non-financial performance in a co-operative, this study is ought to be conducted to fill the gap.

FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Previous literature revealed that finance and planning are able to influence the financial and non-financial performances in Malaysia. Based on the above-mentioned literature, this study proposes a conceptual model as illustrated in Figure 1.

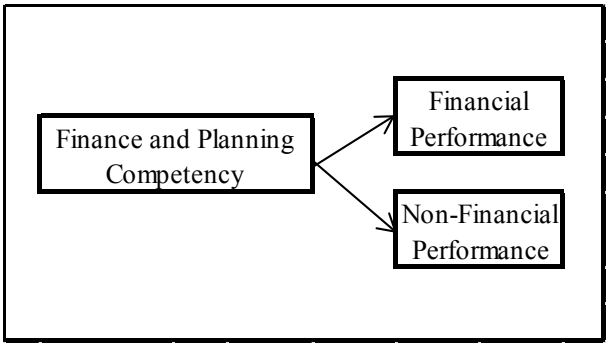

Figure 1: Research Framework

Thus, two hypotheses were formulated to direct the research problems and aims of the study.
H1: Finance and planning competency positively influences financial performance.
H2: Finance and planning competency positively influences non-financial performance.

DATA AND METHODOLOGY

We espoused a quantitative approach in conducting this study. The samples consisted of board of directors of co-operatives operating in Sabah, Malaysia. To ensure that the sample characteristics corresponded to the nature of the study, a non-probability purposive sampling technique was adopted to ensure the collected data were indeed from valid sources. A 7-point Likert scale anchored by "strongly disagree" (1) to "strongly agree" (7) was used as the measurement for the independent and dependent variables. Sample size estimation was determined using G*power 3.0 analysis (Faul et al., 2007). By using G-Power Analysis software, with the effect size of f square 0.15, α error pro 0.05, power Gf 0.95 with 2 tested predictors. Therefore, 107 respondents are the minimum sampling for this study. 200 questionnaires were distributed; and 112 completed and usable copies were recollected. Figure 1 depicted the research framework that contained statements of three variables under investigation. The variables were examined using multiple items (Hayduk & Littvay, 2012) and the data was then analysed using Smart PLS 3.0 (Ringle et al., 2015) to assess the hypotheses.

RESULTS AND DISCUSSION

A total of 112 respondents from board of directors of co-operatives in Sabah, Malaysia were reachable through the questionnaires and most of the respondents were males (59.8%) while the remaining were females (40.2%). More than 78 percent of the respondents were above 35 years old. In terms of the size of their operations, majority of the respondents were from medium size co-operatives (40.2%) followed by micro (34.8%), small (23%), and big co-operatives (4.5%) respectively. The respondents' profile is summarized in Table 1.

Table 1: Respondents' Profile

Variable		Frequency	Percent
Gender	Male	67	59.8
	Female	45	40.2
Age	< 25	7	6.3
	26-35	17	15.2
	36-45	20	17.9
	46-55	33	29.5
	> 55	35	31.3
Category of Co-op	Big	5	4.5
	Medium	45	40.2
	Small	23	20.5
	Micro	39	34.8
Position Held	< 5	84	75.0
	6-10	12	10.7

Variable		Frequency	Percent
	11-15	8	7.1
	> 15	8	7.1
Work Experience	< 1	28	25.0
	1-5	32	28.6
	6-10	24	21.4
	> 10	28	25.0
Education	Primary	23	20.5
	MCE/SPM/SPMV	47	42.0
	Matriculation/STAM/STPM	9	8.0
	Diploma	11	9.8
	Degree	17	15.2
	Master	4	3.6
	PhD	1	.9
Position	Chairman	12	10.7
	Secretary	11	9.8
	Treasury	18	16.1
	Other	71	63.4
Ethnicity	Malay	12	10.7
	Bumi Sabah	90	80.4
	Other	10	8.9

Measurement Model Assessment

Table 2 demonstrates the findings of construct reliability (CR) and convergent validity testing. The results confirm that the constructs (or variables under investigation) to have high internal consistency (Roldán & Sánchez-Franco, 2012) and sufficient average variance extracted (AVE) to validate the convergent validity (Hair et al., 2017).

Table 2: Measurement Model Assessment

Construct	Item	Loadings	CA	CR	AVE	CV (Ave > 0.5)
Financial Performance	PK1	0.961	0.971	0.977	0.895	Yes
	PK2	0.970				
	PK3	0.944				
	PK4	0.940				
	PK5	0.914				

Construct	Item	Loadings	CA	CR	AVE	CV (Ave > 0.5)
Non-Financial Performance	PKB1	0.904	0.949	0.961	0.831	Yes
	PKB2	0.941				
	PKB3	0.927				
	PKB4	0.894				
	PKB5	0.890				
Planning Competency	KK1	0.904	0.936	0.954	0.839	Yes
	KK2	0.935				
	KK3	0.940				
	KK4	0.884				

**No item was deleted as loading Composite Reliability > .708 (Hair et al., 2010, & Hair et al., 2014)*

Table 3 displayed HTMT criterion to evaluate discriminant validity (Ringle, et al., 2015). The result specifies that the discriminant validity is well-established at HTMT0.85 (Diamantopoulos & Siguaw, 2006). The findings indicated that it is appropriate to proceed with structural model assessment to test the hypotheses of the study as there is no issue of multi-collinearity between items loaded on different constructs in the outer model.

Table 3: HTMT Criterion

	Financial Performance	Non-Financial Performance	Planning Competency
Financial Performance	–		
Non-Financial Performance	0.802	–	
Planning Competency	0.653	0.696	–

Criteria: Discriminant validity is established at HTMT0.85

Structural Model Assessment

To assess the hypotheses, a 5000-bootstrap re-sampling of data is conducted (Hair et al., 2017). Table IV demonstrates the assessment of the path co-efficient, which is represented by Beta values for each path relationship. The results show both hypotheses were indeed supported. Table IV also exhibits the quality of the model. These hypotheses did possess substantial effect sizes. The predictive relevance values for both dependent variables are larger than 0, indicating that the independent variable, specifically Board of Directors' finance and planning competency is capable to predict the co-operative's financial and non-financial performances as anticipated by Q^2 using blindfolding procedure (Hair et al., 2017).

Table 4: Path Coefficients and Model Quality Assessment

Direct Effects	**Beta**	**S.E.**	**t-value**	**p-value**	**5.00%**	**95.00%**	**Decision**	**f^2**	**R^2**	**VIF**	**Q^2**
Planning Competency -> Financial Performance	0.632	0.051	12.267	0.000	0.531	0.727	Supported	0.663	0.399	1.000	0.320
Planning Competency -> Non-Financial Performance	0.658	0.075	8.797	0.000	0.490	0.782	Supported	0.765	0.433	1.000	0.324

Path Coefficient 0.01, 0.05 (Hair et al. 2017)
Lateral Collinearity: VIF 3.3 or higher (Diamantopoulos & Sigouw 2006)
R2 ≥ 0.26 consider Substantial (Cohen, 1989)
F2 ≥ 0.26 consider Substantial (Cohen, 1989)
Q2 > 0.00 consider large (Hair, 2017)

DISCUSSION AND CONCLUSION

Board of Directors' Finance and planning competency contributed significantly to the co-operative's financial performance. As pointed earlier, the very existence of co-operatives is voluntary in concept, and user-based in nature. Hence, every elected member of board of directors in a co-operative has an important responsibility and role to play in ensuring his/her competency is in line with the need of the co-operatives movement to contribute more towards realizing the nation economic goals of becoming a high-income country by the year 2024 (The Edge Markets, 2018). Only with efficient management will there be a strong co-operative movement which is truly a self-help and independent business enterprise. Members who fail to uphold their responsibilities to their co-operatives will destroy the organization. As evident from the analysis, it is critical for the members to participate to ensure a vibrant co-operative. Members need to undergo constant training to enable them to perform their role and understand that they must contribute to the nation.

Although the co-operative movement was an option to assist the government to accomplish national development goals, the co-operative movement needs to be re-examined, especially regarding its membership, governance, and management. Specifically, serious consideration has to go into improving the governance and management of co-operatives. Strict enforcement of co-operative law has to be realized to ensure every co-operative's board of directors comply with co-operative principles and law to further improve co-operative businesses, increase sustainability, and enhance the possibility of success and achievement of any government plan for the development of co-operatives. To ensure the sustainability of the co-operatives, members should appoint professional managers. This is modelling the successful co-operatives which are big establishments as these cooperatives are usually managed by professional managers.

As the sustainability and progress of most organizations including co-operatives depend highly on its performance, the government through its Ministry of Entrepreneur Development should monitor closely the co-operatives' performance to ensure the success and achievement of the National Co-operative Plan. The public is wiser nowadays, therefore, perception on the role of co-operatives in the nation's economic and social development should be constantly improved. Hence, the improvement of the competencies of board of directors indirectly enhances public perception of co-operatives. Additionally, the Suruhanjaya Koperasi Malaysia should review its policy in appointing qualified individuals as board of directors to run the co-operatives in Malaysia. Only the qualified members in the board of directors can direct the co-operatives towards the right path to generate profit for its members. Efforts have to be geared towards driving the existing co-operatives to be efficient and profitable by appointing professionals and qualified individuals in the board of directors. As the current co-operatives have not achieved its full potentials, inefficiencies due to lack of competency among the members in the board

of directors could be costly not only to the relevant co-operatives and its members but also for the government.

Future studies should consider examining the influence of board of directors' competencies on co-operatives' performance based on multi-group analysis (MGA-PLS) to identify differences between groups based on cluster size, types of cooperative, the size of the board of directors, ethnicity, tenure, gender, and educational background. Multi-group analysis is not only able to identify differences between groups in cooperatives, but it is also important which is based on recent trends of analysis among scholars. Furthermore, the focus of the study is well received in high impact journals and articles in keeping with the latest developments in analytical techniques.

REFERENCES

Aziz, A. (2018, October). Malaysia may only become high-income nation by 2024. *The Edge Markets*. Retrieved from https://www.theedgemarkets.com/article/malaysia-may-only-become-highincome-nation-2024

Babb, E. M., & Boynton, R. D. (1981). Comparative performance of cooperative and private cheese plants in Wisconsin. *North Central Journal of Agricultural Economics, 3*, 157-164.

Boyatzis, R. E. (1982). *The competent manager: A model for effective performance*. Toronto: John Wiley & Sons.

Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management, 17*(4), 263-282.

Dubois, D., & Prade, H. (1996). What are fuzzy rules and how to use them. *Fuzzy Sets and Systems*, *84*(2), 169-185.

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*, 175-191.

Fokken, P. M. (2003). *Construction and validation for competencies of [a] board self-assessment questionnaire (BSAQ) for park and recreation board members: A model development*. University of Oregon: Kinesiology Publications.

Gradous, D. (1989). *Systems theory applied to human resource development*. University of Minnesota Training and Development Research Center, Department of Vocational and Technical Education and the American Society for Training and Development Research Committee.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Thousand Oaks, California: Sage Publications.

Hayduk, L. A., & Littvay, L. (2012). Should researchers use single indicators, best indicators, or multiple indicators in structural equation models?. *BMC Medical Research Methodology, 12* (159).

Jacobs, R. (1989). *Assessing management competencies: report on the survey of current arrangements in the UK for the assessment of management competencies*. Ashridge Management Research Group.

LeVay, C. (1983). Agricultural co-operative theory: a review. *Journal of Agricultural Economics*, *34*(1), 1-44. doi: 10.1111/j.1477-9552.1983.tb00973

Malaysia Co-operative Societies Commission .(2010), "Economic reports cooperative sector 2010", available at: www.skm.gov.my/index.php/en/pusat-media/penerbitan/laporan-tahunan/book/25-annual-report-2010/7-annual-report (accessed October 6, 2018).

Malaysia Co-operative Societies Commission (2011a), "National Cooperative Policy 2011-2020", available at: http://sehub.net/wp-content/themes/se/download/%EB%A7%90%EB%A0%88%EC%9D%B4%EC%8B%9C%EC%95%84NationalCo-operativePolicy2011-2020.pdf (accessed October 6, 2018).

Malaysia Co-operative Societies Commission (2011b), "Annual index for 100 best co-operatives in Malaysia", available at: www.skm.gov.my/getmedia/43a89500-817f-4525-841f-914d113d94af/2011.pdf.aspx (accessed February 18, 2018).

Miller, C. C., & Cardinal, L. B. (1994). Strategic planning and firm performance: A synthesis of more than two decades of research. *Academy of Management Journal, 37*, 1649-1665.

Othman, A., Mansor, N., & Kari, F. (2014). Assessing the performance of co-operatives in Malaysia: an analysis of co-operative groups using a data envelopment analysis approach. *Asia Pacific Business Review, 20*(3), 484-505.

Parliament, C., Lerman, Z., & Fulton, J. (1990). Performance of cooperatives and investor-owned firms in the dairy industry. *Journal of Agricultural Cooperation, 5*, 1-16.

Pathak, R. D., & Kumar, N. (2008). The key factors contributing to successful performance of cooperatives in Fiji for building a harmonious society. *Intl Journal of Public Administration*, *31*(6), 690-706.

Pearce, J. A., II, Freeman, E. B., & Robinson, R. B. (1987). The tenuous link between formal strategic planning and financial performance. *Academy of Management Review*, *12*(October): 658-675.

Ringle, C., Wende, S., & Will, A. (2015). SmartPLS 3.0. Retrieved from http:// www.smartpls.com

Roldán, J. L., & Sánchez-Franco, M. J. (2012). Variance-based structural equation modeling: Guidelines for using partial least squares. In M. Mora, O. Gelman, A. L. Steenkamp, & M. Raisinghani (Eds.). *Research methodologies, innovations and philosophies in software systems engineering and information systems* (pp. 193-221). Hershey, PA: IGI Global.

Royer, R. S., Wissman, R. A., & Kraenzle, C. A. (1990). Farmer cooperatives' financial profile. U.S. Department of Agriculture, Agricultural Cooperative Service. Rep. 91, Sept.

Schrader, L., Babb, E. M., Boynton R. D., & Lang, M. G. (1985). Cooperative and Proprietary Agribusiness: Comparison of Performance. Research Bulletin 982, Purdue University, Agricultural Experiment Station, West Lafayette, Indiana.

Sexton, R. J., & Iskow, J. (1993). What do we know about the economics efficiency of cooperatives: An evaluative study. *Journal of Cooperatives, 8*, 15-27.

Staatz, J. M. (1983). The cooperative as a Coalition: A game-theoretic approach. *American Journal of Agricultural Economics, 65*,1084-1089.

White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, *66*(5), 297.