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Does the Governance Compliance Effect Cooperative Performance?

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This study scrutinizes the influence of corporate governance compliance assessment score to assess financial performance of 100 prominent cooperatives in Malaysia. We use static panel data estimation techniques and Panel-Corrected Standard Error (PCSE) to analyze the data. All static panel estimators confirm an inconclusive role of governance, while PCSE confirms a positive role of it in explaining financial performance. Other control variables, namely, leverage, age, dividends and benefits of cooperatives influence cooperative financial performance negatively. This research considers the need for cooperatives in Malaysia to improve governance for better industry resilience. This study provides the first empirical evidence on the impact of governance compliance to cooperative performance in Malaysia using panel data analysis. The findings introduce new cooperative specific characteristics and institutional country level governance in the estimation model.

Key words: *corporate governance, financial performance, cooperative.*

Introduction

From pre-independence until the present day, cooperatives have emerged as one of the fastest growing business entities in Malaysia. Generally, cooperatives carry out business activities similar to other businesses except that their establishments and transactions are in accordance with cooperative principles and laws. For non-financial firms, the regulatory bodies around the world have issued strict law, regulations and corporate governance code to prevent collapse due to fraud and failures in governance (Tariq & Abbas 2013). A recent study on governance indicates that the governance system promotes increased organization value and performance (Bhagat & Bolton 2008; Bhagat & Bolton 2013; Nguyen et al. 2014; Tan et al. 2017). In addition, a governance system is designed to protect the interest of investors in a firm (Shleifer & Vishney 1997; La Porta et al. 2000).

The effort to reform corporate governance system in cooperative organization is not profound in the case of listed firms in Malaysia due to public ownership. As the importance of cooperative organization in delivering product and services has grown, they have come under increased scrutiny. Nevertheless, *Suruhanjaya Koperasi Malaysia* (SKM) that act as a regulator to Malaysia cooperative has implemented a control system based on the cooperative governance checklist. The checklist produces a score that determine the 100 best cooperatives in each financial year. A precise evaluation on governance compliance and financial performance is not only important to listed firms but also relevant to cooperative organization.

Therefore, the objective of this study is to examine the effect of cooperative governance and others control variables, such as, leverage as a proxy to agency cost, age, size and asset growth on cooperative financial performance. This study also intends to determine whether variables such as dividend and members welfare act as a cooperative characteristic (for examples: welfare funds, death benefits, education funding) that effects financial performance (Hussain et al., 2019). From one aspect, dividend payments and members' welfare are important because it depicts the objective of the cooperative. In addition, the external variables, namely Political and Institutional Quality Index are used to test for robustness (Barth et al. 2013; Erkens et al. 2012). This index is also known as the World Governance Indexes (WGI) (Kaufmann et al., 2006).

Literature Review

Corporate Governance and Performance

According to Claessens (2006), corporate governance includes 'the relationship between: shareholders, creditors, and corporations; financial markets, institutions and corporations; and employees and corporations. Corporate governance also encompasses the issue of corporate social responsibility which includes aspects such as the dealings of the firm with respect to culture and the environment. However, there is no conclusive definition for the term corporate governance. Several researchers such as La Porta et al. (2000); Shleifer and Vishny (1997); and Cadbury (1992) say that the term refers to the provision of structures, principles, and processes used to administer, manage and control the operation of an organization. Therefore, the governance structures act as a mechanism in assessing and controlling the relation of organization activities which benefits the firm's performance.

There exists empirical evidence that good corporate governance can lead or improve financial performance, better investment decision by management (Shleifer and Vishny, 1997) and better distributed free cash flow to shareholders (La Porta et al. 2000; Tabassum,Singh & Singh 2018). Bhagat and Bolton (2008) conducted empirical studies to test the relationship between the corporate governance, corporate structure and ownership structure and firm performance. Their study found that financial performance, governance, capital structure and ownership are interrelated. Empirical tests conducted by them were based on the OLS linear regression model to demonstrate that the financial performance, governance, capital structure and ownership are interconnected. They used return on assets (ROA) as a proxy to measure firm financial performance. Their result found corporate governance is significantly positively correlated to firm performance, and proved that corporate governance is a mechanism that can be used to reduce individual opportunism in a firm.

Recently, an extended model was introduced to link code compliance and firm performance explicitly as evidence of code compliance positively impacting on firm performance (Tariq and Abbas, 2013). Tariq and Abbas (2013) provide empirical evidence on efficacy of the rule-based Code of Corporate Governance compliance and firm performance using a panel data of non-financial data of 119 Pakistani firms for an 8 year period. More significantly, their study has reported a positive impact of compliance on a firm's performance. Meanwhile, a study by Dubreuil & Mirada (2015) discussed the influence of internal and external governance which can affect the financial performance of Microfinance institution (MFI). The study reported that external governance mechanisms did not affect financial performance of Micro Finance Institution (MFI) in 82 countries in 2011. Experience from the failure of California Cooperative Rice, which is the Rice Growers Association (RGA) has been viewed from the perspective of agency costs, where the cooperative management failed to govern well, not making improvements and trade linkages, and the governance role

members failed to monitor and engage in management as one of the reasons why this cooperative was not able to sustain even though it had been established for 80 years (Keeling & Carter, 2004).

In Malaysia, the significant contribution of cooperative is obviously accepted under the SKM which is a government institution that acts as a regulator to cooperatives and provides financial support, business development, legislative updates, and regulatory control under Ministry of Domestic Trade, Co-operatives and Consumerism. However, there were cooperatives facing bad management practices because of conflict of interest among board members who failed to meet the SKM regulations. SKM has introduced a corporate governance reform to cooperatives, which includes the compliance assessment representing a corporate governance score. The compliance assessment contains a governance checklist of attributes for cooperatives to monitor. Therefore, the governance compliance assessment represents a monitoring and controlling function by SKM to evaluate the governance compliance of cooperatives. This corporate governance compliance assessment would allow SKM to create pressure for cooperatives to aim for and achieve better resilience in cooperative governance and management, be transparent among members and promote better financial performance (Ahmed, Majid & Zin, 2016; Ali & Haseeb, 2019; Haseeb, Abidin, Hye, & Hartani, 2018; Haseeb., 2019; Suryanto, Haseeb, & Hartani, 2018).

Therefore, this study concludes that the importance of governance to cooperatives is crucial as governance is to listed firms since the main goal of governance is to ensure all operations of the organization are based on a set of laws, policies and regulations ensuring rights of all parties in the organization will be preserved and protected.

Methodology

This paper applies regressions using static panel data estimators to examine the relation of financial performance (FP) to governance index and explanatory variables. The financial data and corporate governance compliance assessment scores relating to this study were obtained from *Jabatan Koordinasi dan Statistik* (Statistic Coordination Division) of SKM. The sample consists of one hundred best cooperatives for the years 2012-2014. The final sample consists of 382 observations of unbalanced panel after considering the outliers in the regression model. For each FP a regression using a governance variable and explanatory variables was run to choose the best fit model for the data. In addition, consistent with recent research (Barth et al. 2013) a robustness test was run by including country level governance into the regression model. A separate robustness regression test using PCSE (AR1) further investigateda the relation of FP and governance.

Model Specification

The basis for the model used in this study is broadly similar to Tariq & Abbas (2013) with the addition of welfare and interests of cooperative members' variables (MBEN) to show that it is compatible with the specific characteristics of cooperatives. The model is as follows:

$$FP_{it} = \beta_0 + \beta_1 CGCS_{it} + \beta_2 DEBT_{it} + \beta_3 LnFS_{it} + \beta_4 AGE_{it} + \beta_5 DIV_{it} + \beta_6 MBEN_{it} + \beta_7 AG_{it} + u_{it} \quad (1)$$

However, Barth et al. (2013) and Erken et al. (2012) argued that the external variables, namely Political and Institutional Quality Index can be used to test for robustness. This index is also known as the World Governance Indexes (WGI) (Kaufmann et al. 2006). This index was measured by means of each country and it has different governance dimensions that include Government effectiveness, Political stability, Regulatory Quality, Rule of law, voice and accountability and Control and corruption. Therefore, equation (1) can be written as:

$$FP_{it} = \beta_0 + \beta_1 CGCS_{it} + \beta_2 DEBT_{it} + \beta_3 LnFS_{it} + \beta_4 AGE_{it} + \beta_5 DIV_{it} + \beta_6 MBEN_{it} + \beta_7 AG_{it} + \beta_8 WGI_{it} + u_{it} \quad (2)$$

where FP is financial performance measured by ROA and ROE. and DEBT is leverage, AGE is cooperative age, DIV is dividend policy, MBEN is cooperative members benefit, AG is asset growth, WGI is world governance index and the subscripts *i* and *t* index is cooperative and time, respectively. In addition, *u* represent the error term.

Definition of Variables

Financial performance

The use of financial ratios could facilitate a firm's financial analysis and give a more precise evaluation and indicator for financial management. Based on previous studies on governance, this study used profitability ratios, which comprise the return on total assets (ROA) and return on equity (ROE) (Lerman & Parliament 1990; Beaubien & Rixon 2012).

Corporate governance

Measurement of governance of cooperatives is based on the value of the cooperative's governance compliance data reports obtained from the SKM. This governance compliance measurement consists of two parts. The first part assesses compliance in terms of the annual general meeting and audit. The measurement in second part is related to a cooperative's compliance with acts and laws that have been established. Any cooperative that meets these items, will be awarded 1 whilst a 0 is awardeda if otherwise.

Control variables

The control variables for this study are leverage, size, age, members benefit and welfare, and assets growth. We use leverage to measure the ability of managers or the board members to manage cooperatives' leverage. Higher leverage, or debt, indicates greater probability for the company to default. Leverage value measures the extent of the amount of assets financed by debt or the firm's total debt (Abdul Rahman 2006). Higher risk of default payment would arise agency cost (Myers 1977), and debt give a negative effect to performance (Myers 1977; Jensen 1986). This study uses leverage ratio as a capital structure measures (Margatis & Psillaki 2010, Shamsuddin et al. 2017) and proxy towards agency costs (Myers 1977) and observe its relationship with the cooperative's financial performance.

This study applies the total assets as a proxy to cooperative size that has been shown in studies on public-listed companies (Tariq & Abbas 2013; Barth et al. 2013; Chhaochharia et al. 2012) and on cooperatives (Soboh et al. 2011; Mohammad,Afaneh & Khanfar 2017). A cooperative's age is based on the date the cooperative is officially registered. Previous studies using age as an independent variable in observing the relationship between governance and firm's performance can be found in Bozec et al. (2010); Tariq & Abbas (2013).

In this study, the issue of whether the welfare and benefits for members of cooperatives (for examples: welfare funds, death benefits, education funds) and dividend policy affect the financial performance is in question. Both variables signify the objective of the establishment of the cooperative, whereby it is not solely to obtain profit, but also to protect the welfare of cooperative members through dividends. The asset growth as one of the proxies to the component of asset in the governance influenced by the managers as stated by Giroud & Mueller (2010); Chhaochharia et al. (2012); Tariq & Abbas (2013).

External variable

The Politic and Institution Quality Indexes are applied as external variables and as a robustness check. These indexes are known as the World Governance Indexes (WGI)

(Kaufmann et al. 2006) and have been used in relation to bank performance and efficiency (Barth et al. 2013). The WGI dataset was constructeds through cross-country survey and expertise. These are measured in six different governance dimensions that include Government effectiveness, Political stability, Regulatory quality, Rule of law, Voice and accountability and Control and corruption. Following to Barth et al. (2013); Law & Azman-Saini (2012) this study calculates the average of WGI from these indexes into one single index.

Results

Table 1 and 2 below show the regression results of ROA and ROE model used to explain the effect of governance and other explanatory variables. The analysis in panel data began by comparing pooled OLS and RE model for all performance measures. The result of Breusch and Pagan Lagrangian multiplier test (BP-LM) of p- value < 0.05, led to the conclsion that RE model is more appropriate than OLS. Then, the second test used in panel data analysis compared the RE and FE model by using the Hausman test. The result of p-value < 0.05 in the Hausman test indicates that the RE model is not appropriate and that the FE model is preferred. The Modified Wald test for presence of heteroscedasticity and Langrange-Multiplier test were conducted for serial correlation. The results show there is a heteroskedasticity problem (p-value < 0.05). Thus, following to Tariq & Abbas (2013); Muhmad & Hashim (2015), Prais-Winston PCSE (AR1) was employed for robust specification. PCSE model is the best option to rectify heteroscedasticity, first order serial correlation and cross sectional correlation (Tas et al. 2013). The discussion on the regression will focus on the robust specification of PCSE (AR1).

Table 1: Regression analysis of Model 1: ROA

Regression Model	Pooled OLS		Random Effect		Fixed Effect	Fixed Effect	PCSE (AR1)	PCSE (AR1)
Variables	Coefficient (p-value)		Coefficient (p-value)		Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)
CG	0.0345 (0.0610)		0.0223 (0.1510)		0.0003 (0.9830)	-0.0007 (0.9620)	0.0177 (0.1660)	0.0174 (0.1700)
DEBT	-0.0773*** (0.0000)		-0.0602*** (0.0000)		-0.0377 (0.0810)	-0.0380 (0.0870)	-0.0688*** (0.0000)	-0.0686*** (0.0000)
FS	-0.00008 (0.9430)		-0.0019 (0.2050)		-0.0168*** (0.0000)	-0.0166*** (0.0010)	-0.0041*** (0.0010)	-0.0040*** (0.0010)
AGE	-0.0004*** (0.0010)		-0.0004* (0.0260)		0.0027 (0.1920)	0.0029 (0.1670)	-0.0003** (0.0040)	-0.0003** (0.0050)
DIV	-0.0582*** (0.0000)		-0.0405*** (0.0000)		-0.0294*** (0.0000)	-0.0303*** (0.0010)	-0.0456*** (0.0000)	-0.0461*** (0.0000)
MBEN	-0.0098*** (0.0000)		-0.0127*** (0.0000)		-0.0254*** (0.0000)	-0.0253*** (0.0000)	-0.0127*** (0.0000)	-0.0126*** (0.0000)
AG	0.0003** (0.0040)		0.0003*** (0.0000)		0.0006** (0.0090)	0.0006** (0.0090)	0.0003** (0.0350)	0.0003** (0.0340)
WGI						-0.0735 (0.4300)		-0.0087 (0.6460)
Constant	0.1407*** (0.0000)		0.1454*** (0.0000)		0.2699** (0.0020)	0.2861 (0.0010)	0.1907 (0.0000)***	0.2097 (0.0000)***

Observation	281		281		281	281	281	281
R2	0.3907		0.3604		0.3684	0.3714	0.7887	0.7922
Wald Chi			127.89				189.17	195.04
BP-LM		265.80 (0.0000)						
Hausman				60.05 (0.0000)				
Heteroscedasticity					7.729 (0.0000)			

*, **, *** Significant level at 5%, 10%, and 1% respectively.

Table 2: Regression Analysis Model 2: ROE

Regression Model	Pooled OLS		Random Effect		Fixed Effect	Fixed Effect	PCSE (AR1)	PCSE (AR1)
Variables	Coefficient (p-value)		Coefficient (p-value)		Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)
CG	0.5009* (0.0430)		0.2604 (0.0740)		0.1592 (0.1500)	0.1621 (0.1590)	0.6364*** (0.0000)	0.6444*** (0.0000)
DEBT	-0.3464* (0.0160)		-0.2853* (0.0150)		-0.2717 (0.0570)	-0.2708 (0.0540)	-0.1489 (0.2830)	-0.1502 (0.2800)
FS	-0.0012 (0.9380)		-0.0394 (0.0650)		-0.1687*** (0.0000)	-0.1692*** (0.0000)	-0.0396 (0.0750)	-0.0405 (0.0690)

AGE	-0.0052** (0.0050)		-0.0060* (0.0270)		0.0233 (0.1240)	0.0229 (0.1260)	-0.0060*** (0.0000)	-0.0061*** (0.0000)
DIV	-0.8385*** (0.0000)		-0.2767*** (0.0000)		-0.1719*** (0.0000)	-0.1695*** (0.0000)	-0.4906*** (0.0000)	-0.4907*** (0.0000)
MBEN	0.0232 (0.4250)		-0.0303 (0.2570)		-0.1113*** (0.0000)	-0.1115*** (0.0000)	0.0279 (0.4980)	0.0278 (0.4980)
AG	0.0035* (0.0110)		-0.0044*** (0.0000)		-0.0057*** (0.0170)	-0.0057* (0.0180)	0.0027* (0.0370)	0.0027* (0.0370)
WGI						0.1967 (0.7750)		0.2898 (0.7200)
Constant	0.6150* (0.0530)		1.2638*** (0.000)		2.2441* (0.0010)	2.2006*** (0.0010)	0.9456*** (0.0070)	0.8648 (0.0600)
Observation	281		281		281	281	281	281
R2	0.3447		0.2433		0.2396	0.2400	0.4596	0.4627
Wald Chi			60.38				62.29	62.54
BP-LM		94.68 (0.0000)						
Hausman				53.53 (0.0000)				

*, **, *** Significant level at 5%, 10%, and 1% respectively.

Results from the PCSE (AR1) regression analysis reveal that governance shows a positive significant level at 1% with ROE. This result is consistent with Tariq & Abbas's (2013) findings. The conclusion is that governance plays a strong role on financial performance in relation to its equity. The leverage shows a negative relation but only significant to ROA. However, this result is not consistent with previous studies showing a significant positive relationship between leverage and the ROA (Tariq & Abbas 2013). A negative relationship between leverage and operational profitability indicates that the cooperatives face high agency cost (Grossman & Hart 1983). This is mainly because the debt used does not contribute to enhance performance on assets and capital employed but increasing cost in operational and overinvestment activities.

Cooperative size demonstrates a significant negative relationship on ROA. Meanwhile, the age of a cooperative shows a significant negative relationship on all measures of financial performance. Andres (2008) also states that there is a negative relationship between the lifespan of the firm in Germany and the performance measured by return on equity.

Dividend and benefit or welfare to the members, have a negative significant relation with all measures of financial performance except that the members benefit does not have a significant relation with ROE. The negative sign of coefficient of these two variables indicates that cooperatives in Malaysia have recognized the value of sharing dividend and welfare benefits with cooperative members. The variable of asset growth involves a significant positive relationship on all of the performance analysis which is consistent with other studies (Tariq & Abbas 2013). The world governance index is added to the regression model as robustness variables did not show any significant relationship to all financial performance.

Findings of subsample

This study performs an additional analysis by using the governance index division as an alternative to the governance overall score. The basis of measurement for the score is the division on the governance index. Categorically, the average number of cooperative index is greater than the mean index of cooperatives as a whole which is 0.9522 and is high level of governance compliance. The cooperatives that have a significant governance compliance score are expected to have low-cost agency and a more consistent dividend pay-out compared to cooperatives that have low compliance rating. The reason is that the cooperative board members and managers in the cooperatives with the high governance scores have advantages with regard to management, external funds information, and investment. Tables 3, 4, 5 and 6 below report the estimation regression result of the dimension of governance compliance.

Table 3: Estimation result for cooperative with high compliance: Fixed effect model

Variables	**Model ROA (1)** Coefficient (Standard error)	**Model ROA (2)** Coefficient (Standard error)	**Model ROE (1)** Coefficient (Standard error)	**Model ROE (2)** Coefficient (Standard error)
DEBT	-0.0041 (0.0142)	-0.0043 (0.0145)	-0.1188 (0.1485)	-0.1187 (0.1482)
LnSIZE	-0.0172*** (0.0039)	-0.0171*** (0.0171)	-0.1759*** (0.0267)	-0.1760*** (0.0269)
AGE	0.0006 (0.0023)	0.0007 (0.0023)	0.0076 (0.0189)	0.0075 (0.0190)
DIV	-0.0391*** (0.0077)	-0.0404*** (0.0083)	-0.2435*** (0.0453)	-0.2430*** (0.0444)
MBEN	-0.0249** (0.0076)	-0.0250** (0.0076)	-0.1119** (0.0421)	-0.1118** (0.0418)
AG	-0.0009*** (0.0002)	-0.0009*** (0.0002)	0.0087*** (0.0024)	0.0087*** (0.0023)
WGI		-0.0595 (0.1024)		0.0268 (0.7447)
Constant	0.3657*** (0.0861)	0.3799*** (0.0841)	3.1912*** (0.8571)	3.1848*** (0.8431)
R^2 F statistic P value	0.4004 8.78 0.0000	0.4026 7.58 0.0000	0.3158 18.20 0.0000	0.3158 16.53 0.0000

*, **, *** significance level at 5% ($p<0.05$), 10% ($p<0.01$) & 1% ($p<0.001$).

The p-value of F-test statistic for the regression is significant which supports our model specification

Table 4: Estimation result for cooperative with high compliance: (PCSE AR1)

Variables	**Model ROA (1)** Coefficient (Standard error)	**Model ROA (2)** Coefficient (Standard error)	**Model ROE (1)** Coefficient (Standard error)	**Model ROE (2)** Coefficient (Standard error)
DEBT	-0.0538*** (0.0112)	-0.0532*** (0.0110)	-0.0361 (0.1505)	-0.0160 (0.1506)

LnSIZE	-0.0067*** (0.0039)	-0.0067 (0.0014)	-0.0499*** (0.0146)	-0.0515*** (0.0147)
AGE	-0.0001 (0.0001)	-0.0001** (0.0001)	-0.0051** (0.0018)	-0.0049** (0.0018)
DIV	-0.0446*** (0.0071)	-0.0447*** (0.0069)	-0.5772*** (0.1466)	-0.59100*** (0.1441)
MBEN	-0.0070*** (0.0019)	-0.0076** (0.0019)	0.0422 (0.0599)	0.0407 (0.0597)
AG	-0.0009*** (0.0002)	-0.0009 (0.0002)	0.0092*** (0.0020)	0.0092*** (0.0021)
WGI		-0.0467 (0.0783)		-1.1032 (0.9766)
Constant	0.2299*** (0.0198)	0.2446* (0.0322)	1.6672*** (0.2440)	2.0494*** (0.4088)
R^2 Wald Chi P value	0.7989 197.77 0.0000	0.7970 189.31 0.0000	0.5181 78.69 0.0000	0.5337 81.73 0.0000

*, **, *** significance level at 5% ($p<0.05$), 10% ($p<0.01$) & 1% ($p<0.001$).

The p-value of Wald Chi test for the regression is significant which supports our model specification.

Table 5: Estimation result for cooperative with low compliance: Fixed effect model

Variables	**Model ROA (1)** Coefficient (Standard error)	**Model ROA (2)** Coefficient (Standard error)	**Model ROE (1)** Coefficient (Standard error)	**Model ROE (2)** Coefficient (Standard error)
DEBT	-0.1231 (0.0802)	-0.1085 (0.0842)	0.7109 (0.7790)	0.9296 (0.8902)
LnSIZE	-0.0517 (0.0723)	-0.0310 (0.0709)	-0.0624 (0.8864)	0.2471 (0.8628)
AGE	0.0055 (0.0041)	0.0050 (0.0033)	0.0490 (0.0492)	0.0424 (0.0360)
DIV	-0.0402 (0.0442)	-0.0345 (0.0456)	0.5269 (0.3991)	0.6127 (0.4582)
MBEN	-0.0458 (0.0468)	-0.0549 (0.0472)	-0.7053 (0.4010)	-0.8421 (0.4243)

AG	0.0001 (0.0006)	0.0009 (0.0006)	-0.0104 (0.0083)	-0.0123 (0.0081)
WGI		0.3262 (0.2708)		4.8896 (2.6791)
Constant	0.7890 (1.0780)	0.3617 (1.1329)	-0.1822 (12.8582	-6.5872 (13.7597)
R^2 F statistic P value	0.4760 6.70 0.0000	0.5243 8.77 0.0000	0.5255 17.93 0.0000	0.6166 39.78 0.0000

*, **, *** significance level at 5% (p<0.05), 10% (p<0.01) & 1% (p<0.001).

The p-value of F-test statistic for the regression is significant which supports our model specification.

Table 6: Estimation result for cooperative with low compliance: (PCSE AR1)

Variables	**Model ROA (1)** Coefficient (Standard error)	**Model ROA (2)** Coefficient (Standard error)	**Model ROE (1)** Coefficient (Standard error)	**Model ROE (2)** Coefficient (Standard error)
DEBT	-0.1034*** (0.0161)	-0.1048*** (0.0167)	-0.8978* (0.3804)	-0.8912* (0.3899)
LnSIZE	0.0011 (0.0023)	0.0017 (0.0020)	0.0830* (0.0420)	0.0811* (0.0385)
AGE	-0.0007** (0.0002)	-0.0008** (0.0002)	-0.0127* (0.0058)	-0.0123* (0.0055)
DIV	-0.0674*** (0.0155)	-0.0670*** (0.0152)	-1.0003*** (0.2879)	-1.0049** (0.3076)
MBEN	-0.0113** (0.0042)	-0.0114** (0.0043)	0.0498 (0.0453)	0.0517 (0.0453)
AG	0.00009 (0.0001)	0.0004 (0.0001)	0.0004 (0.0010)	0.0005 (0.0010)
WGI		-0.2868 (0.3057)		0.7954 (2.2320)
Constant	0.1520*** (0.0410)	0.2419* (0.1214)	0.1897*** (0.3579)	-0.0690 (0.8249)
R^2	0.5789	0.5959	0.5156	0.5029

Wald Chi	52.21	60.29	73.68	85.36
P value	0.0000	0.0000	0.0000	0.0000

*, **, *** significance level at 5% ($p<0.05$), 10% ($p<0.01$) & 1% ($p<0.001$).
The p-value of Wald Chi test for the regression is significant which supports our model specification.

The estimation results of the fixed effects model indicate that the performance of cooperatives of high compliance do not show a significant relationship with leverage. Size shows a significant negative relationship with performance. The growth of assets affects performance improvement. This category of cooperatives also committed to pay consistent dividends, members benefits and welfare compared to low compliance cooperatives. These results are similar to research by Price et al. (2011).

The estimation on the PCSE (AR1) indicates that leverage and dividends show a significant adverse impact on the performance of cooperatives with low compliance. The cooperative's member benefit and welfare shows a significant negative to ROA and ROCE. The assets growth has a positive effect to ROE and ROCE at 1% significant level. These results indicate that a low compliance cooperative is more vulnerable to agency problems, for example in this study, problems of managing debt, assets and payment of dividend which do not affect the financial performance.

Conclusion and Recommendation

This study has proven that governance has a role in influencing cooperative financial performance on ROE under PCSE (AR1). The research findings on leverage demonstrate a negative significant relation meaning that cooperatives are more likely to use debt that leads to an increase in fixed expenses and increased agency costs. These results reveal that cooperatives decided to use debt due to limited source of capital and equity (Soboh et al. 2009); Lerman & Parliament (1990) also reported that cooperatives depend more on debt compared to listed companies. The value of high debt that does not contribute to an increase in financial performance will increase the risk of difficulties in managing debt and financial performance. Other relevant factors that play an important role in influencing performance are cooperative size, age, dividend and cooperative benefits and welfare. However, these factos coefficients show a negative relation to performance, indicating that the enhancement of dividends, benefit and welfare to cooperative members may reduce financial performance. The negative significance also demonstrates that cooperatives need restraint in liquidity with current profit to pay dividends and member benefits and welfare. Most cooperatives in this

study prioritized meeting their objectives, to safeguard and protect the interests of members despite having to experiencing liquidity constraints.

Based on the findings that have been discussed, this study recommends the following with regard to the issues of governance and agency in cooperatives and suggests that SKM revisits the governance compliance items. The items do not only need to concentrate on the pivotal rules and legislation, but also to be extended to a governance assessment that more profoundly enhance the cooperatives' financial performance. For example, in this study, the finding that leverage impact is negative to financial performance shows that cooperatives experience agency cost issues and board members make debt to support operational activities or investment in assets. Hence, SKM needs to introduce governance items that may reduce the costs of operation especially the agency cost, including effective monitoring on the poor profit loans and investment. It is proposed that control be enforced on the leverage and payment of dividends, benefits and welfare to cooperative members such that it is at an appropriate level that would not lead to reduced performance. If this issue persists, most cooperatives may have to face the issue of liquidity and a slow growth rate.

REFERENCES

Abdul Rahman, R. 2006. Effective Corporate Governance. University Publication Centre (UPENA), UiTM, Malaysia.

Ahmed, U., Majid, A. H. A., & Zin, M. L. M. (2016). HR Moderating HR: Critical link between Developmental HR Practices and work engagement in a Moderated Model. Management Review: An International Journal, 11(2), 4.

Ali, A., & Haseeb, M. (2019). Radio frequency identification (RFID) technology as a strategic tool towards higher performance of supply chain operations in textile and apparel industry of Malaysia. Uncertain Supply Chain Management, 7(2), 215-226.

Andres, C. (2008). Large shareholders and firm performance—An empirical examination of founding-family ownership. Journal of Corporate Finance, 14(4): 431-445.

Barth, J. R., Lin, C., Ma, Y., Seade, J., Song, F. M. 2012. Do bank regulation, supervision and monitoring enhance or impede bank efficiency? Journal of Banking & Finance, 37: 2879-2892.

Beaubien, L. & Rixon, D. 2012. Key Performance Indicators in Co-operatives: Direction and Principles, Journal of Co-operative Studies, 45 (2): 5-15.

Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. Journal of corporate finance, 14(3): 257-273.

Bhagat, S., & Bolton, B. (2013). Director ownership, governance, and performance. Journal of Financial and Quantitative Analysis, 48(01): 105-135.

Bozec, R., Dia, M., & Bozec, Y. (2010). Governance–Performance Relationship: A Re-examination Using Technical Efficiency Measures. British Journal of Management, 21(3): 684-700.

Cadbury, A. (1992). Cadbury report: The financial aspects of corporate governance. Tech reprt, HMG, London.

Chhaochharia, V. dan Grinstein, Y. 2007. Corporate governance and firm value: the impact of 2002 governance rules. Journal of Finance, 62(4): 1789-1825.

Claessens, S. (2006). Corporate governance and development. The World Bank Research Observer, 21(1): 91-122.

Erkens, D. H., Hung, M., & Matos, P. (2012). Corporate governance in the 2007–2008 financial crisis: Evidence from financial institutions worldwide. Journal of Corporate Finance, 18(2): 389-411.

Estape-Dubreuil, G. & Torreguitart-Mirada, C. (2015). Governance mechanisms, social performance disclosure and performance in microfinance: Does legal status matter? Annals of Public and Cooperative Economics, 86(1): 137-155.

Giroud, X. & Muller, H. 2010. Does corporate governance matter in competitive industries? Journal of Financial Economics, 95: 312-331.

governance indicators, 1996-2005. World Bank.

Grossman, S. J., & Hart, O. D. (1983). An analysis of the principal-agent problem. Econometrica: Journal of the Econometric Society, 7-45.

Haseeb, M., Abidin, I. S. Z., Hye, Q. M. A., & Hartani, N. H. (2018). The Impact of Renewable Energy on Economic Well-Being of Malaysia: Fresh Evidence from Auto Regressive Distributed Lag Bound Testing Approach. International Journal of Energy Economics and Policy, 9(1), 269-275.

Haseeb., H. Z., G. Hartani., N.H., Pahi., M.H. Nadeem., H. . (2019). Environmental Analysis of the Effect of Population Growth Rate on Supply Chain Performance and Economic Growth of Indonesia. Ekoloji, 28(107).

Hussain, H.I., Ali, A., Thaker, H.M.T., & Ali., M. (2019) Firm Performance and Family Related Directors: Empirical Evidence from an Emerging Market, Contemporary Economics, 13 (2), 187-204.

Jensen, M. 1986. Agency Costs of Free-cash-flow, Corporate Finance, and Takeovers. American Economic Review 76(2): 323-329.

Kaufmann, K., Kraay, A., Mastruzzi, M., 2006, Governance matters V: Worldwide

Keeling, J. J. dan Carter, C. A. 2004. Lessons in Failure: The Ricer Grower Association Cooperative. Paper presented at American Agricultural Economics Association Annual Meeting, Dever, Colorado in The Role and Significance of Cooperatives in New Zealand Agriculture: A C

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R. (2000). Investor protection and corporate governance, Journal of Financial Economics, 58: 3-27.

Law, S. H., & Azman-Saini, W. N. W. (2012). Institutional quality, governance, and financial development. Economics of Governance, 13(3): 217-236.

Lerman, Z. and Parliament, C. 1990. Size and industry affects in the performance of agricultural co-cooperative. Agricultural Economics, 6: 15-29.

Margaritis, D., & Psillaki, M. (2010). Capital structure, equity ownership and firm performance. Journal of Banking & Finance, 34(3): 621-632.

Mohammad, F., Afaneh, S., & Khanfar, S. M. (2017). The Impact of Destination Service Quality And Destination Environment On Tourist Satisfaction: A Field Study on Jordan's Golden Triangle For Tourists'point Of View. Journal of Tourism Management Research, 5(1), 23-49.

Muhmad, S. N., & Hashim, H. A. (2015). Using the CAMEL Framework in Assessing Bank Performance in Malaysia. International Journal of Economics, Management and Accounting, 23(1).

Myers, S. C. (1977). Determinants of corporate borrowing. Journal of financial economics, 5(2), 147-175.Nguyen, T., Locke, S., & Reddy, K. (2014). A dynamic estimation of governance structures and financial performance for Singaporean companies. Economic Modelling, 40: 1-11.

Nguyen, T., Locke, S., & Reddy, K. (2014). A dynamic estimation of governance structures and financial performance for Singaporean companies. Economic Modelling*:* 40, 1-11.

Shamsuddin, Z., Ismail, A. G., Mahmood, S., Yusoff, W. S. (2017). The Effect of Capital Structure on Credit Cooperative's Performance in Malaysia. World Applied Sciences Journal, 35(9): 1965-1970.

Shleifer, A. and Vishney, R. W. 1997. A Survey of Corporate Governance. Journal of Finance, 52 (2): 737-783

Soboh, R. A. M. E. R., Oude Lansink, A., & van Dijk, G. (2011). Distinguishing dairy cooperatives from investor-owned firms in Europe using financial indicators. Agribusiness, 27(1): 34-46.

Soboh, R. A. M. E., Lansink, A. O., Giesen, G and Van Dijk, G. 2009. Performance Measurement of the Agricultural Marketing Cooperatives: The Gap between Theory and Practice. Review of Agricultural Economics, 31: 446-469.

Suryanto, T., Haseeb, M., & Hartani, N. H. (2018). The Correlates of Developing Green Supply Chain Management Practices: Firms Level Analysis in Malaysia. International Journal of Supply Chain Management, 7(5), 316.

Tabassum, N., Singh, J. S. K., & Singh, K. (2018). Microcredit Could Influence Empowerment of Women. A Quantitative Study in Chittagong, Bangladesh. International Journal of Asian Social Science, 8(6), 284-295.

Tan, D. T., Chapple, L., Walsh, K. D. (2017). Corporate fraud culture: Re-examining the corporate governance and performance relation. Accounting and Finance, 57: 597-620.

Tariq, Y., and Abbas, Z. (2013). Compliance and multidimensional firm performance: Evaluating the efficacy of rule-based code of corporate governance. Economic Modelling, 35: 565-575.

Tas, N., Hepsen, A. and Onder, E. 2013. Analyzing Macroeconomic Indicators of Economic Growth Using Panel Data. Journal of Finance and Investment Analysis, 2(3): 41-53.

APPENDIX

The SKM governance compliance items

1.0 Mandatory Offence
1.1 Compliance of the Annual General Meeting
1.2 Compliance Audits of Current Account

Cooperative that complies with item 1.1 and 1.2 is given a score of 1 and, 0 if otherwise. Cooperative is given an extra score of 1 if successfully complies with item 1.1 and 1.2. If a cooperative does not comply with both of these items, the cooperative is considered to be non-compliant in the governance which results in a failure to proceed with item 2.0.

2.0 Legal Compliance Assessment
(Document Submission Compliance)
2.1 List of Board Members
2.2 Minutes of the Annual General Meeting
2.3 Minutes of Meeting of the Board
2.4 There are no arrears in the Trust Fund
2.5 Honorarium Payment Approval
2.6 Subsidiary Establishment Compliance
2.7 Investment Compliance
2.8 Approval of Opening Branch Offices

Cooperative that complies with item 2.1 - 2.5 is given a score of 1 and, 0 if otherwise. While item 2.6 to 2.8 is given a score of 0 if complied and, 1 if otherwise. So far there is no cooperative society fails to comply with these items. The total score of compliance of items is 8.