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A Pre- and Post- MCCG 2012 Evaluation on the Impacts of Corporate Governance and Intellectual Capital with Firm Performance

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Abstract
This paper aims to examine and compare the impact of corporate governance (CG) and intellectual capital (IC) on firm performance (FP) between pre-Malaysia Code of Corporate Governance (MCCG) 2012 and post- MCCG 2012 of GLCs. Panel data analysis was used. The data were collected from the annual report of the 32 GLCs from 2005 to 2012 (pre- MCCG 2012) and from 2013 to 2020 (post- MCCG 2012). There was a total of 512 firm-year observations. The CG of post- MCCG 2012 has a greater impact on earnings per share (EPS) compared to pre- MCCG 2012. The IC of pre- MCCG 2012 has a greater impact on return on equity (ROE), Tobin's Q and EPS.

Keywords: Corporate Governance; Intellectual Capital; MCCG 2012; Government-Linked Companies

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1.0 Introduction

The Malaysian Government participated in the company activities to reduce social inequality and eliminate poverty by introducing the New Economic Policy in 1969 (Said et al., 2020). Government-Linked Companies (GLCs) are companies that have a main commercial objective. Under the view of the objective, the Malaysian Government has a direct controlling stake. For instance, the Government's ability to appoint a board of director (BOD) members, senior management, and the governmental body participated in making significant decisions for GLCs (Said et al., 2020). The Malaysia Code of Corporate Governance (MCCG) 2012 was established to strengthen Corporate Governance (CG) and increase the domestic and global values of the Malaysian market. MCCG 2012 emphasized strengthening board structure and composition and recognizing the role of directors as active and responsible fiduciaries. MCCG 2012 was revised after considering changing market dynamics, international developments, and the need to continually recalibrate and enhance the effectiveness of the CG framework. The MCCG 2012 had adopted a new structure that provides greater clarity, more information to companies, and more straightforward reading. Recommendations and commentaries follow each principle in MCCG 2012. The principles encapsulate broad concepts underpinning good corporate governance that companies should apply. The recommendations are specific standards that contribute to the principles. There has been a lack of prior research examining and comparing CG and IC's impact on firm performance (FP) between pre- MCCG 2012 and post- MCCG 2012 of Malaysia GLCs. Therefore, this study aims to examine and compare the impact of CG and IC on FP between pre- MCCG 2012 and post- MCCG 2012 of Malaysia GLCs. Intellectual Capital (IC) has become a hot topic for most researchers and practitioners because of the flourishing of knowledge-based economies. IC is significant compared to traditional tangible assets as it is a critical influence on a company's success and is deemed the most important intangible asset. For instance, many leading

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companies, including IBM, have recognized the importance of IC. They have begun to undertake IC initiatives and have made substantial investments in IC development, maintenance, and protection, focusing on the human resource perspective. IC can be a source of innovation and enhance the FP (Shahwan & Habib, 2020). Different components of IC may have varied impacts on FP. Since it was generally accepted that IC was the keystone of organizational competitive advantage, examining the specific impacts of different IC components on FP was evocative. Additionally, the FP will be affected if the company does not recognize and is not aware of its IC (Shahwan & Habib, 2020).

2.0 Literature Review

2.1 Malaysia Code of Corporate Governance (MCCG)

The High-Level Finance Committee initially introduced MCCG on Corporate Governance (FCCG) in March 2020, aiming to enhance the CG practices in Malaysia and instil the confidence of shareholders. The purpose of MCCG was to develop the best practices and principles on CG procedures and structures to assist those companies in accomplishing the ideal governance framework. The second MCCG 2007 was developed to strengthen the Bursa Malaysia Listing Requirements, which took effect on 1st January 2001. The Securities Commission of Malaysia published the Corporate Governance Blueprint 2011 in July to fortify market and self-discipline. MCCG 2012 was converted from the Corporate Governance Blueprint 2011 to maintain itself aligned and relevant with the internal practices and standards (Jamil et al., 2021). MCCG 2012 was specifically targeted at companies listed on Bursa Malaysia. There have eight principles and twenty-six recommendations included in MCCG 2012. On 26th April 2017, the MCCG 2017 was introduced by the Securities Commission of Malaysia. The latest MCCG 2021 was introduced by the Securities Commission to promote good CG.

Table1. Summary of the Principle of MCCG 2000, MCCG 2007, MCCG 2012, MCCG 2017 and MCCG 2021

Principle	MCCG 2000	MCCG 2007	MCCG 2012	MCCG 2017	MCCG 2021
1	Directors	Directors	Establish clear roles and responsibilities	Board leadership and effectiveness	Board leadership and effectiveness
2	Directors' remuneration	Directors' remuneration	Strengthen composition	Effective audit and risk management	Effective audit and risk management
3	Shareholders	Shareholders	Reinforce independence	Integrity in corporate reporting and meaningful relationships with stakeholders	Integrity in corporate reporting and meaningful relationships with stakeholders
4	Accountability and audit	Accountability and audit	Foster commitment		
5			Uphold integrity in financial reporting		
6			Recognize and manage risks		
7			Ensure timely and high-quality disclosure		
8			Strengthen the relationship between the company and shareholders		

2.2 Theoretical Framework

Several theoretical frameworks were used to examine the impact of CG and IC on FP. Agency theory was adopted in CG to explain the interrelation between the shareholders and the BODs (Rehman et al., 2021). Stakeholder theory was implemented in CG to describe the effect of firm activity on all the company stakeholders (Zhang et al., 2020). Stewardship theory was used to describe the behaviour of the BODs when maximizing the shareholders' wealth (Kyere & Ausloos, 2021). According to Massaro et al. (2020), the resource-based view (RBV) theory has been used to investigate the interrelation between resources and FP.

2.3 Corporate Governance

The objective of CG was to sustain equality of interests between shareholders and stakeholders in a company (Ngatno et al., 2021). CG was used to manage a company to increase investor confidence, reduce agency problems, enhance shareholder wealth, raise company goodwill, and increase investment opportunities. In short, the principle and guidelines of CG were usually employed by the company to stay away from business failure. Much academic research and the public discussed the significance of CG practices in the business firm (Arayakarnkul et al., 2022).

2.3.1 Relationship between Board Size (BS) and Firm Performance (FP)

Rahman et al. (2022) recommended that the effective internal CG mechanism be recognized as the BODs. It was essential to have optimum BS as they could manage the company's operation and management more successfully and increase the return of investors (Alabdullah et al., 2021). BS was measured by the total number of Directors on the Board (Tran & Turkiela, 2020).

H1A: BS of post-MCCG 2012 have a greater impact on ROA compared to that of pre-MCCG 2012.
H1B: BS of post-MCCG 2012 have a greater impact on ROE compared to that of pre-MCCG 2012.
H1C: BS of post-MCCG 2012 have a greater impact on Tobin's Q compared to that of pre-MCCG 2012.
H1D: BS of post-MCCG 2012 have a greater impact on EPS compared to that of pre-MCCG 2012.

2.3.2 Relationship between Number of Board Meetings (BM) and Firm Performance (FP)

According to Fariha et al. (2022), conflict of interest and the agency cost can be effectively diminished by the decisions made during BM; hence, the BM effectively maximized the shareholders' wealth. The BODs were able to appraise and enhance executive management's

current strategies and performance during BM (Ng et al., 2021). BM can measure by the total number of board meetings (Aljaaidi et al., 2021).

H2A: BM of post-MCCG 2012 have a greater impact on ROA compared to that of pre-MCCG 2012.
H2B: BM of post-MCCG 2012 have a greater impact on ROE compared to that of pre-MCCG 2012.
H2C: BM of post-MCCG 2012 have a greater impact on Tobin's Q compared to that of pre-MCCG 2012.
H2D: BM of post-MCCG 2012 have a greater impact on EPS compared to that of pre-MCCG 2012.

2.3.3 Relationship between Number of Women Directors on Board (WD) and Firm Performance (FP)

The functions of WD are gaining more attention from the public and researchers nowadays, including the investigations of how the WD influenced FP (Arora, 2021). Jimenez et al. (2020) stated that more WD had been appointed to the board because of the CG recommendations, standards, and practices that proposed to raise women's involvement in the BODs and the company's senior management team the world. The measurement for WD was the total number of women directors on board (Sattar et al., 2021).

H3A: WD of post-MCCG 2012 have a greater impact on ROA compared to that of pre-MCCG 2012.
H3B: WD of post-MCCG 2012 have a greater impact on ROE compared to that of pre-MCCG 2012.
H3C: WD of post-MCCG 2012 have a greater impact on Tobin's Q compared to that of pre-MCCG 2012.
H3D: WD of post-MCCG 2012 have a greater impact on EPS compared to that of pre-MCCG 2012.

2.3.4 Relationship between Percentage of Independent Directors on Board (ID) and Firm Performance (FP)

There was a need to have independent directors on the board because they would not collaborate with the chief executive officer (CEO) or the board's chairman, diminishing shareholders' interest (Tuo et al., 2021). Thus, a Board should involve independent directors to keep the interest of shareholders safe and improve FP (Li & Rainville, 2021). ID was measured by the divided number of independent directors on the board by the total numbers of directors on boards and multiple by 100% (Tran & Turkiela, 2020).

H4A: IDs of post-MCCG 2012 have a greater impact on ROA compared to that of pre-MCCG 2012.
H4B: IDs of post-MCCG 2012 have a greater impact on ROE compared to that of pre-MCCG 2012.
H4C: IDs of post-MCCG 2012 have a greater impact on Tobin's Q compared to that of pre-MCCG 2012.
H4D: IDs of post-MCCG 2012 have a greater impact on EPS compared to that of pre-MCCG 2012.

2.3.5 Relationship between Proportion of Independent Directors in Audit Committee (IDAC) and Firm Performance (FP)

Al-ahdal and Hashim (2022) stated that the main requirements of a competent audit committee should be independence from the company's management. The firm with more IDAC was able to sustain its truthfulness as the audit committee members did not hold any personal interests in the firm. They made all the decisions in the best interests of shareholders (Fariha et al., 2022b). The measurement indicator for IDAC was divided by the number of independent directors in the audit committee by the total members in the audit committee and multiple by 100% (Farooque et al., 2020).

H5A: IDAC of post-MCCG 2012 have a greater impact on ROA compared to that of pre-MCCG 2012.
H5B: IDAC of post-MCCG 2012 have a greater impact on ROE compared to that of pre-MCCG 2012.
H5C: IDAC of post-MCCG 2012 have a greater impact on Tobin's Q compared to that of pre-MCCG 2012.
H5D: IDAC of post-MCCG 2012 have a greater impact on EPS compared to that of pre-MCCG 2012.

2.4 Intellectual Capital

The business's conduct has changed from labour-based to knowledge-based due to the tight competition. Knowledge-based business can help the company enhance the FP, thus, altering the company's value creation (Oussama, 2021). The IC was the intellectual assets belonging to a company that can be transferred into profit but not recognized on the financial reports, such as abilities, exceptional knowledge, procedures, and values. Muhammad et al. (2021) argued that the expertise and wisdom of CG can leverage and create IC to encourage the acquisition of knowledge-intensive firms. CG can ensure that managerial decisions are made to raise shareholders' wealth via the intelligent utilization of IC. In the perspective of Malaysia, MCCG 2012 drives more adequate CG mechanisms and diminishes the degree of management's opportunistic judgement. Thus, there would be a more substantial effect on IC and FP (Oussama, 2021). Bakri et al. (2021) indicated the moderating impact of MCCG 2012 on IC association with FP. Therefore, it can be summarized that IC is implausible to be transformed into FP without the existence of excellent CG practices.

2.4.1 Relationship between Human Capital Efficiency (HCE) and Firm Performance (FP)

Ousama et al. (2020) stated that HCE plays a significant role in creating a company's value through differentiating its products and services and reducing production costs. Thus, the company might gain cost advantages and competitive advantages. The indicator for HCE was divided by value added by human capital, where value-added was the sum of operating profit, employee cost, depreciation and amortization, and human capital was the total salaries and benefits (Chatterjee et al., 2022).

H6A: HCE of post-MCCG 2012 have a greater impact on ROA compared to that of pre-MCCG 2012.
H6B: HCE of post-MCCG 2012 have a greater impact on ROE compared to that of pre-MCCG 2012.
H6C: HCE of post-MCCG 2012 have a greater impact on Tobin's Q compared to that of pre-MCCG 2012.
H6D: HCE of post-MCCG 2012 have a greater impact on EPS compared to that of pre-MCCG 2012.

2.4.2 Relationship between Structural Capital Efficiency (SCE) and Firm Performance (FP)

In Ramirez et al. (2020) report, SCE represented the critical weapon for the firm in this knowledge age because it generated the architecture and tools for shifting, establishing, continuing and strengthening knowledge throughout its operations. Prado et al. (2020) noted that a firm

which was master and proficient in knowledge management practices would utilize its resources more creatively and efficiently; thus, they could perform better than their competitors. SCE can be measured by dividing structural capital by value-added, where structural capital is equal to the value-added minus human capital (AlQershi et al., 2022).

H7A: SCE of post-MCCG 2012 have a greater impact on ROA compared to that of pre-MCCG 2012.
H7B: SCE of post-MCCG 2012 have a greater impact on ROE compared to that of pre-MCCG 2012.
H7C: SCE of post-MCCG 2012 have a greater impact on Tobin's Q compared to that of pre-MCCG 2012.
H7D: SCE of post-MCCG 2012 have a greater impact on EPS compared to that of pre-MCCG 2012.

2.4.3 Relationship between Capital Employed Efficiency (CEE) and Firm Performance (FP)

CEE represents the efficiency of a firm in creating value by utilizing its financial capital (Vo & Tran, 2021). Dalwai and Salehi (2021), they found that CEE was significant and essential in enhancing FP. CEE measurement was divided by value added by capital employed, where capital employed is equal to equity plus long-term liabilities (Ge & Xu, 2021).

H8A: CEE of post-MCCG 2012 have a greater impact on ROA compared to that of pre-MCCG 2012.
H8B: CEE of post-MCCG 2012 have a greater impact on ROE compared to that of pre-MCCG 2012.
H8C: CEE of post-MCCG 2012 have a greater impact on Tobin's Q compared to that of pre-MCCG 2012.
H8D: CEE of post-MCCG 2012 have a greater impact on EPS compared to that of pre-MCCG 2012.

2.5 Dependent Variables and Control Variables

There have four FP indicators used in this research, which are Return on Assets (ROA), Return on Equity (ROE), Tobin's Q and Earning Per Shares (EPS). The control variables used in this study were firm size (FS) and leverage (LV). The company's total assets measured FS, and the more significant FS enhanced FP because the company was allowed to enjoy market power advantages and economies of scale (Song et al., 2021). The measurement of LV was divided by total liabilities with the companies' total assets, the costs of finance and risks of default caused by LV might influence the FP, as the higher the LV, the lower the FP (Zhou et al., 2021).

2.7 Research Conceptual Framework

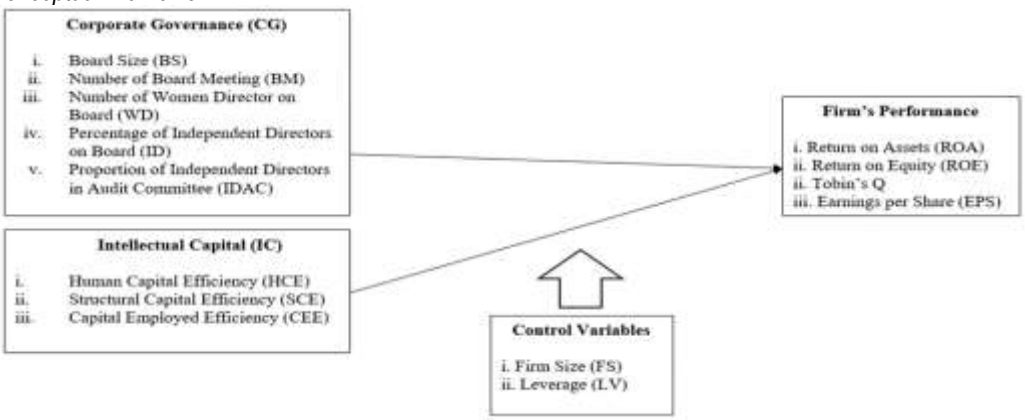

Fig. 1: Research Conceptual Framework

3.0 Methodology

The objective of this study was to examine and compare the impact of CG variables and IC variables on FP between pre-MCCG 2012 and post-MCCG 2012 of Malaysia GLCs. The data was gathered from 16 years annual report from 2005 to 2020. The pre-MCCG 2012 covered the period from 2005 to 2012, while the post- MCCG 2012 covered 2013 to 2020. The sample size of this study was the 32 GLCs listed on Bursa Malaysia. The analysis method used in this research was Panel Data Analysis, completed by EViews software. There are two types of panel data analytics models employed in this study: the fixed-effect model and the random effect model. The equations of dependent variables for panel data analysis were formed as below:

$$ROA_{i,t} = \beta_0 + \beta_1 FS_{i,t} + \beta_2 LV_{i,t} + \beta_3 BS_{i,t} + \beta_4 BM_{i,t} + \beta_5 WD_{i,t} + \beta_6 ID + \beta_7 IDAC_{i,t} + \beta_8 HCE_{i,t} + \beta_9 SCE_{i,t} + \beta_{10} CEE_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$ROE_{i,t} = \beta_0 + \beta_1 FS_{i,t} + \beta_2 LV_{i,t} + \beta_3 BS_{i,t} + \beta_4 BM_{i,t} + \beta_5 WD_{i,t} + \beta_6 ID + \beta_7 IDAC_{i,t} + \beta_8 HCE_{i,t} + \beta_9 SCE_{i,t} + \beta_{10} CEE_{i,t} + \varepsilon_{i,t} \quad (2)$$

$$Tobin's\ Q_{i,t} = \beta_0 + \beta_1 FS_{i,t} + \beta_2 LV_{i,t} + \beta_3 BS_{i,t} + \beta_4 BM_{i,t} + \beta_5 WD_{i,t} + \beta_6 ID + \beta_7 IDAC_{i,t} + \beta_8 HCE_{i,t} + \beta_9 SCE_{i,t} + \beta_{10} CEE_{i,t} + \varepsilon_{i,t} \quad (3)$$

$$EPS_{i,t} = \beta_0 + \beta_1 FS_{i,t} + \beta_2 LV_{i,t} + \beta_3 BS_{i,t} + \beta_4 BM_{i,t} + \beta_5 WD_{i,t} + \beta_6 ID + \beta_7 IDAC_{i,t} + \beta_8 HCE_{i,t} + \beta_9 SCE_{i,t} + \beta_{10} CEE_{i,t} + \varepsilon_{i,t} \quad (4)$$

$\beta_0 = Intercept\ for\ the\ regression\ model$
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11} = Partial\ regression\ coefficients$
$i = Observation\ number\ in\ a\ cross - sectional\ data\ set$
$t = Observation\ number\ in\ a\ time - series\ data\ set$
$\varepsilon = Error\ terms\ of\ the\ regression\ model$

4.0 Findings

4.1 Panel Data Analysis

Table 2. Panel Data Analysis Results of ROA, ROE, Tobin's Q and EPS

	ROA		ROE		Tobin's Q		EPS	
	Pre- '12	**Post- '12**	**Pre- '12**	**Post- '12**	**Pre- '12**	**Post- '12**	**Pre- '12**	**Post- '12**
	(8 years)	(8 years)	(8 years)	(8 years)	(8 years)	(8 years)	(8 years)	(8 years)
C	*0.2401*	*0.0000*	*0.6987*	*0.5960*	*0.6522*	*0.1412*	*0.2674*	*0.0006*
FS	0.7644	0.7682	0.5997	0.9519	0.4896	0.2551	0.3685	0.6004
LV	**-0.0000*** **	**-0.0000*** **	**-0.0134** **	**0.0000*** **	**0.0006*** **	**0.0262** **	**-0.0004*** **	**-0.0000*** **
BS	**-0.0243** **	0.4253	0.9910	0.1101	0.1883	**0.0059*** **	**-0.0209** **	0.6673
BM	0.8179	0.8240	0.1080	0.3898	0.7294	0.1770	0.2686	0.1531
WD	0.5027	**-0.0967***	0.6182	0.9853	0.9751	0.4374	0.2403	**-0.0327** **
ID	**-0.0401** **	**-0.0013*** **	0.9886	0.8887	**-0.0003*** **	0.1751	0.8345	**-0.0196** **
IDAC	0.1198	0.9247	0.6914	0.7384	**0.0030*** **	0.7040	0.1105	0.8623
HCE	**0.0000*** **	**0.0001*** **	**0.0002*** **	0.8409	**0.0000*** **	0.4228	**0.0000*** **	**0.0025*** **
SCE	0.3898	0.6026	**0.0967***	**-0.0099*** **	0.4283	0.9388	**0.0770***	0.6233
CEE	**0.0004*** **	**0.0000*** **	**0.0814***	**0.0000*** **	**0.0000*** **	**0.0016*** **	**0.0200** **	**0.0056*** **

***. Correlation is significant at the 0.01 level.
**. Correlation is significant at the 0.05 level.
*. Correlation is significant at the 0.1 level.

Table 2 shows the panel data analysis results of ROA, ROE, Tobin's Q and EPS. The FS (CV) and BM have no significant impact on ROA, ROE, Tobin's Q and EPS of pre- MCCG 2012 and post- MCCG 2012. The LV (CV) and CEE significantly impact ROA, ROE, Tobin's Q and EPS of both pre-MCCG 2012 and post- MCCG 2012. The BS significantly impacts ROA and EPS of pre- MCCG 2012 and Tobin's Q of post- MCCG 2012. The WD only significantly impacts ROA and EPS of post- MCCG 2012. The ID significantly impacts ROA of pre-MCCG 2012 and post- MCCG 2012, Tobin's Q of pre- MCCG 2012 and EPS of post- MCCG 2012. The IDAC only significantly impacts Tobin's Q of pre- MCCG 2012. On the other hand, the HCE significantly impacts ROA and EPS of both pre- MCCG 2012 and post- MCCG 2012 and ROE and Tobin's Q of pre- MCCG 2012. The SCE significantly impacts ROE of pre- MCCG 2012 and post- MCCG 2012 and EPS of pre- MCCG 2012.

4.2 Hausman Test

Table 3. Hausman Test Summary

Dependent Variables	**P-Value**		**Remarks***	
	Pre- '12	**Post- '12**	**Pre- '12**	**Post- '12**
ROA	0.0000	0.0078	Fixed Effect Model	Fixed Effect Model
ROE	0.0075	0.0000	Fixed Effect Model	Fixed Effect Model
Tobin's Q	0.0000	0.0000	Fixed Effect Model	Fixed Effect Model
EPS	0.0066	0.0064	Fixed Effect Model	Fixed Effect Model

*Use Fixed Effect Model when P-Value ≤0.05; Random Effect Model when P-Value >0.05.

Hausman test was used to determine whether the Fixed Effect Model or Random Effect Model would be the most appropriate regression for this research. As shown in Table 3, all of the Panel Data analyses adopted the Fixed Effect Model as their P-Value was less than 0.05.

4.3 Hypothesis Testing

Table 4. Summary of Hypothesis Testing

IVs	**Hypothesis**	**Decision**	**Hypothesis**	**Decision**	**Hypothesis**	**Decision**	**Hypothesis**	**Decision**
BS	H_{1A}	DNA	H_{1B}	I	H_{1C}	**A**	H_{1D}	DNA
BM	H_{2A}	I	H_{2B}	I	H_{2C}	I	H_{2D}	I
WD	H_{3A}	**A**	H_{3B}	I	H_{3C}	I	H_{3D}	**A**
ID	H_{4A}	**A**	H_{4B}	I	H_{4C}	DNA	H_{4D}	**A**
IDAC	H_{5A}	I	H_{5B}	I	H_{5C}	DNA	H_{5D}	I
HCE	H_{6A}	DNA	H_{6B}	DNA	H_{6C}	DNA	H_{6D}	DNA
SCE	H_{7A}	I	H_{7B}	**A**	$H7_{C}$	I	H_{7D}	DNA
CEE	H_{8A}	**A**	H_{8B}	**A**	H_{8C}	DNA	H_{8D}	**A**

A=Accept; I=Inconclusive; DNA=Do Not Accept.

As refer to Table 4 shows the summary of the hypothesis testing of the study. The researchers accepted the hypothesis that CG and IC variables' impact on FP indicators of post- MCCG 2021 was better than pre- MCCG 2012. On the contrary, the researchers did not accept the hypothesis when the impact of CG and IC variables on FP proxies of pre- MCCG 2012 was better than post- MCCG 2012. The

hypothesis that has no significant impact or the same significant level of impact of CG variables and IC variables on FP measurements of pre- MCCG 2012 and post- MCCG 2012 was inconclusive.

Based on the Panel Data analysis results, a conclusion can be made. The CG variables of post- MCCG 2012 have a greater impact on EPS compared to pre- MCCG 2012 based on the number of significant variables. The IC variables of pre- MCCG 2012 have a greater impact on ROE, Tobin's Q and EPS based on the number of significant variables.

5.0 Discussion

Based on the results from Panel Data Analysis, the firm should keep the optimum BS to enhance the FP in terms of ROA, ROE and EPS. In the case of BM, the BODs and company secretary could schedule the appropriate BM and fully utilize the time to make the critical decision. The company must appoint at least 30% of WD to increase the ROE and Tobin's Q. The ID of ROE and Tobin's Q shall be enhanced by appointing enough talent and independent directors. The board should also include IDAC to enhance the FP in ROA, ROE, Tobin's Q and EPS. Malaysia GLCs should comply and adopt the principles recommended in MCCG to enhance their FP.

Furthermore, the company should emphasize their HCE, such as human capital, to increase the FP in terms of ROE and Tobin's Q. The company should revise and review its SCE to enhance ROA, Tobin's Q and EPS. The company could maintain and enhance its CEE performance and thus increase the firm's value creation. To enhance their FP, Malaysia GLCs should improve and maintain their intangible assets, such as human capital, procedures, and knowledge in the organization.

6.0 Conclusion and Recommendations

The research aimed to examine and compare the impact of CG and IC between pre- MCCG 2012 and post- MCCG 2012 FP of Malaysia GLCs. The Panel Data Analysis of CG shows that the MCCG 2012 did not significantly improve the FP. Thus, the MCCG 2012 did not act as a critical role in improving and enhancing the CG practices of the firm. In addition, the Panel Data Analysis of IC stated that the MCCG 2012 did not significantly enhance the FP. There have some limitations to the study. For instance, the sample size was not sufficient to determine the effectiveness of MCCG 2012, the study lack of opinion from the management team, the dependent variables were not adequate to examine the effect of the CG and IC, and the ignorance of the effect of others MCCG. Therefore, the future researcher could expand the sample size and focus on GLCs, but they can also collect secondary and primary data in the form of surveys and questionnaires. Besides, the future researcher might include other dependent variables, such as dividend payout ratio, return on investment and asset turnover value. The effect of MCCG 2000, MCCG 2007 and MCCG 2017 should include in the research to examine their influences.

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