

The Impact of Corporate Governance on Operating Performance during Goods & Services Tax Implementation in Malaysia

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Abstract— The effectiveness of corporate governance provides a promising value creation to firm even during implementation of new policy for example during Goods & Services Tax (GST) implementation in year 2015. By embracing agency theory, this paper investigates five corporate governance variables relationship with operating performance (sales growth and current ratio) during and after GST implementation. This study examines 265 Malaysian listed firms for year 2015 (during) and 2016 (after) GST implementation period. The OLS regression results report that there is significant relationship of corporate governance in firm operating performance particularly during and after GST implementation. Board independent, CEO age and family CEO have positively contribute to sales growth during and after GST implementation. For working capital effectiveness during and after GST implementation, the CEO age and family CEO delineate significant positive association with operating performance (current ratio). This displays on the governance effectiveness in discharging their roles to strengthen operating performance particularly during a new financial or tax policy implementation that requires necessary changes in business processes. It uncovers the transparency of Malaysian corporate governance commitment and acceptance to GST for firm and country sustainable development. In sum, an effective governance system that supports the firm operating performance makes GST as a business friendly tax system.

Keywords— Corporate governance, current ratio, chief executive officer, directors, Goods & Services Tax, operating performance, sales growth, Malaysia

1. Introduction

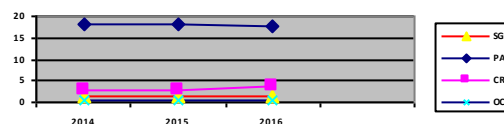
The Goods & Services Tax (GST) is a tax system that enhances the country economic development. Consistently, for country revenue GST was introduced firstly in year 1954 in France. With this, more countries including developing countries

have adopted GST. Globally, many countries find GST is important part of the tax system [1]. In ASEAN countries, namely Thailand, Singapore, Philippines, Cambodia, Vietnam and Laos have used GST as part of their countries' taxation system. Malaysia implemented GST on 15 April 2015, however abolished the GST tax system in mid-2018. Why many countries practice GST as part of their tax system. What is GST? The GST or value added tax is a consumption tax based charged on goods and services at every production and distribution stage in the supply chain including importation of goods and services into the country. In Malaysia, businesses with annual sales minimum RM500,000 require to register with GST and the 6 percent GST levied on taxable goods and services including the importation goods and services. Basically, GST is an indirect tax at every stages of production to bring about uniformity in the system [2]. The GST is charged on most production process transactions in the supply chain with exception refund granted to all parties in the chain of production other than the final consumer for the input tax. The input tax is the GST paid for the consumption of goods by business (registered person) and the output tax is the GST charged by the seller to the purchaser for consuming the goods and services. GST sounds like a business friendly tax to business, where the exceptional total input tax is able to taken away from the total output tax before paying to the government. However, implementation of GST will be a challenging situation on firm's operation activities from pricing strategies to initial set up cost for the new taxation system. This reflects that the initial implementation of GST requires care in planning the business

operating system to avoid a shortfall in form operating performance. During GST implementation firms should have capability to set the right pricing to earn sufficient profit and enough level of cash flows for business operation [3]. Thus, to avoid unfavorable results in the operating performance, requirement of adequate planning, organization and overseeing the business operating process in the supply chain management that necessitate those charge with governance involvement. The corporate governance is responsible for smooth operation of firms for positive firm performance achievement and shareholder wealth protection. As corporate governance roles are to handle in the way that the suppliers of finance to corporations guarantee themselves of getting a return on their investment [4]. The corporate governance ensures the aligned interest is achievable between the principal (shareholders) and the agent (management) in accordance with the agency theory. [5] report that the negative relationship between firm value and agency cost caused the existence of relationship between corporate governance and firm performance. Thus, [6] mention that the greater firm performance is associated with good corporate governance.

The challenge faced by the firm during the GST implementation is tested by analyzing the firm operating performance in [7] study. The authors conducted paired-test to analyse the firm operating performance for pre-during-post GST implementation as shown in Figure 1.1. The authors divided operating performance to profitability and liquidity, for profitability represented by sales growth (SG) and profit after tax (PAT) and for liquidity represented by current ratio (CR) and operating cash flow (OCF). The profitability operating performance for SG shows a positive increase after the post implementation despite slight drop during GST implementation. For PAT there is a slight decrease during GST implementation and further minimal decrease after GST implementation. This reflects that firms have improve the sales growth with good pricing policy and GST do not cause serious effect to profit after tax as there is no massive decrease in profit during and after GST implementation. For liquidity position, the CR showed a positive trend during and after GST position that reflects on good

working capital management in firms. However, the OCF showed a minimal down trend during and after GST implementation. Overall, GST implementation did not severely affect the operating performance of firm as the firms showed a good progress in SG and CR. This reflects that the corporate governance have played an important role during and after GST implementation. However, there is no empirical evidence to support their contribution. Thus, this study takes the opportunity to investigate the nature of relationship between corporate governance with operating performance during and after GST implementation. The operating performance variable is the SG and CR. The SG is an operating performance that determines the right pricing policy and revenue growth. The current ratio is regarded as operating performance as it reflects on the condition of working capital management. The corporate governance variables used for this study is the combination of board characteristics (board independence and board size), women director and CEO characteristics (CEO Age and CEO type). Hence 5 corporate governance variables used to investigate their involvement during and after GST implementation.



	SG	PAT	CR	OCF
2014	1.322	18.118	2.65	0.535
2015	1.248	17.959	2.679	0.496
2016	1.257	17.689	3.761	0.449

Figure 1 Operating performance analysis (Source from: [7])

2. Literature Review

Generally corporate governance is the way the systems of a firm are directed and controlled. This corporate governance creates a platform for best practices in system so that firm policy and procedures provides benefits for firm, shareholders and other stakeholders. As mention by [4] the corporate governance handles the separation of ownership and control issues as prescribed in agency theory, the way in which the shareholders receive return from investments and avoid

managers' misappropriation of shareholders capital by investing in unhealthy projects. The drivers corporate governance are board of directors lead by the chairman and power given to Chief Executive Officer (CEO) to manage the operational and financial matters of the firms. There is no doubt that the boards of directors are the monitoring mechanisms work to aligning the interest between the shareholders and the management to support the agency theory. These boards of directors are responsible to firms and shareholders [8]. [9] opine that board of directors have the main role in corporate governance with various responsibilities ranging from approval of firm strategy plan, policies development that determines firms direction, appointing and managing higher level of management and assuring firms are accountable to shareholders and other stakeholders. Thus, the directors and CEO have profound impact to overall well-being of the firm from managing the operating performance to firm long-term development. The factor determination for firms' administrative excellence is the corporate governance [10]. The implementation of GST requires some changes in the firm operating system that may cause changes in the policy and processes. Thus, the involvement of corporate governance is essential during after GST implementation for promising operating performance that protects the shareholder wealth and investment. Further, women leadership are emphasize in the present corporate governance in shaping firm's best practices. Consistently, this study used board size, board independent, women director, CEO age and CEO type as the corporate governance variables to determine their relationship with operating firm performance during and after GST implementation.

2.1 Board size (BS) and operating performance

Board size is the board composition of total number of board members with mix types of directors [11]. The board size should be on its effectiveness [12]. There is association between board size and firm performance [13]. The large board size supports the resource dependence theory as it has a positive relationship with firm performance [14]. Similarly, [15] report the reason behind the positive relationship between board size and firm performance is that large board with profound intellectual knowledge brings improvement to firms' decision making and positive effect to firm performance. The improvement of relationship between corporate governance and firm

performance as larger boards with widen skills and inter link with firms make effective decisions [5]. On the other hand, some studies find negative relationship board size with firm performance [16]; [17]. The larger board possible to cause disagreement and lack of integration compared smaller board that leads to negative significant relationship between board size and firm performance [18]. This negative relationship is due to information asymmetry between outside and other directors in the firm [19]. According to [20] larger boards are less effective compared to smaller boards. [21] mentions that free riding are positively correlated with board size where it decreases board efficiency in monitoring and the provision of strategic human resource. This develops to hypothesis:

H1: There is a relationship between board size and operating performance.

2.2 Board independent (BI) and operating performance

The board independence level is achieved when the board consists of more effective outside directors with vast experience and well focus in monitoring mechanism of business strategic, financial and operation processes. The directors are considered independent and classified as outside directors when free involvement in firms executive positions. Further to strengthen the board independence, the [22] recommends the board to review annually the independent position of outside directors and limit the tenancy period for independent directors to nine years and tenure extension through shareholders' approval. [18] identify significant positive relationship between board independent and firm performance. The finding shows that the board independent has capabilities, expertise and reasonable experience that contribute positively to firm performance. Similarly, [23] report positive relationship between firm performance and board independence. The [5] study highlight existence of significant positive relationship between board independent and firm performance (ROA). The expertise, connection with external links and advisor role are important for firm profitability.

However, there some previous studies found negative or no association between board independent and firm performance. For example, [24] report on the negative relationship between board independent and firm performance. This is consistent with [25] statement that board main role is not on being as a watchdog but rather taking up

roles on advice and counsel. The negative relationship between board independence and firm performance indicates on the independence limitation provided to outside directors [15]. This is because, for example in developing countries due to limitation in outside directors, the outside directors work as independent directors in other firms' may cause biasness in board independent monitoring, judgement skill and influence of executive directors. [26] a Malaysian study identifies no significant relationship between board independent and firm performance. Similarly, another Malaysian study by [27] finds no significant relationship between board independent and firm performance. The findings of these studies support the statement by [28] that due to busyness of outside directors caused insufficient time to involve in firm affairs and insufficient knowledge in firm environment to make decisions, hence, outside directors depended to CEO for channeling information. Thus, it is hypothesize that:

H2: There is a relationship between board independent and operating performance.

2.3 Women directors (WD)

The policy makers encourage more women directors in board position. The women directors give impact to firm performance [29]. The gender diversity heightens the board effectiveness that influence positively on decision making, governance quality and firm value [30]. There is incremental benefit to firm performance with women directors presence, even the educational level of women directors do not positively influence the firm performance [31]. [32] elaborate that women directors have a better board meeting attendance records compared to male directors and women directors participates in audit committee, nominating committee and corporate governance. In general, the authors report that women directors attend more board meeting compared to male directors and active participation at board and overseeing committee meetings. The firm reputation and women directors are positively connected [33]. The firms with women in management and women directors maintain an ordinary stock price return that proves a positive and significant relationship with firm performance [34]. [35] identify that more senior in age and with degree qualification women directors have positive impact to firm performance. The women directors with a degree is able apply skill in developing firm policies and strategies to improve firm performance. The authors report that women directors with ownership in firms is having significant and negative relationship with firm performance, this due to small percentage of ownership around 15 percent failed to place women

directors in control of the firm. However, there some studies find negative association of women directors with firm performance. There is negative association of women director with firm performance [36]. The women directors in board are mere representation on the existence of board diversity and as a fulfillment to the needs of stakeholders of having women directors in board [36]. The firm record low performance when there is women directors in board [37]. [38] report that higher representation of women in firm starts to reduce the firm performance even women directors are positively related to firm performance. The negative relationship between women directors and firm performance against the resource dependency theory and increases the agency cost [21]. This develops to hypothesis:

H3: There is a relationship between women director and operating performance.

2.4 CEO age (CA) and operating performance

Age has essential role in firm decision making [39]. The younger executives due to limited experienced have lesser competitive advantage compared to older executives [40]. [41] find CEO age positively correlated with firm performance, as it increases the effectiveness of management abilities. [37] report that older directors had good experience are better advisors to guide the firms, thus, encourage appointing directors who are older in age. [40] identify positive association between CEO age with firm performance measured. This indicates the positive association between firm performance and CEO age.

[42] study reports negative significant relationship between directors age and firm performance. The CEO age is negatively related to firm performance where younger CEO work towards risk strategies [43]. Thus, firms with younger CEO are more successful relative to older CEO [43]. The younger CEO are orientated on growth strategies that positively contribute to firm growth compared older CEO [44]. Younger directors are more energize and willing to take more risk while older directors seeks stableness and prudence to decisions [45]. This supports the [46] study that the connection between youthful management and achieving higher firm growth by ensuring more capable young management in more senior position. Consequently, it is hypothesize that:

H4: There is a relationship between CEO age and operating performance

2.5 CEO type (CTY) and operating performance

According to [47] family firms have better firm performance compared to non-family firms. The agency cost is lower as there is well aligned interest between the principal and agent as they are one [48]. If that is the case, how is the performance of family CEO and outside CEO? A Taiwan study, identify that if the firms have practice good governance, both family and professional CEO has ability to improve the firm performance [49]. The family firms with less cash-flow rights from the largest shareholders with professional CEO, it can improve the firm performance [49]. [50] mention that “family companies prefer to have family CEO to manage the company because of strong family cultures, high sense of family unity and belongings within the companies”. Further, family CEO has positive impact to firm performance [51].

However, [52] highlight that firms managed by professional (outside) manager are more efficient in net income generation compared to managers who are owners, further unfavorable performance is observed for family firms managed by owners. Similarly, [53] family CEO have significant negative relationship with firm performance. Further, outside directors have reputation, knowledge and managerial experience, thus, private controlled and family firms benefit from outside director’s appointment [53]. This reflects that further investigation is necessary on which type of CEO is able to lead the management during GST implementation or any new financial/ tax policy implementation. This develops to hypothesis:

H5: There is a relationship between CEO type and operating performance

3. Methodology

The multiple regression statistical analysis is used to determine the nature of relationship between the corporate governance and operating performance variables during and after (2015 & 2016) GST implementation period. The 265 Malaysian listed firms are selected based on their record of market capitalization. The data of these firms collected from the audited annual report during and after GST implementation accessed from Bursa Malaysia website. This paper utilized ordinary least squares (OLS) regression to determine the relationship between the operating performance (SG and CR) with the corporate governance (BS, BI, WD, CA, CTY). The sales growth is one of profitability analysis that highlights on sales trend [54]. The current ratio measures the short-term

debt-paying ability [55]. [56] study propose to use SG and CR as the dependable variables to represent operating performance to determine the relationship with corporate governance during GST implementation. Basically, this paper shall determine the effectiveness of the 5 corporate governance variables in maintaining the sales trend and liquidity position during and after GST implementation period. Thus, the two regression models are developed for Operating Performance-Profitability (OPP) measured by sales growth (SG) and Operating Performance- Liquidity (OPL) measured by current ratio (CR). The regression models are as follows:

$$SG_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BI_{it} + \beta_3 WD_{it} + \beta_4 CA_{it} + \beta_5 CTY_{it} + \beta_6 FS_{it} + \beta_7 FA_{it} + \beta_8 LEV_{it} + \epsilon_{it}$$

(Model 1)

$$CR_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BI_{it} + \beta_3 WD_{it} + \beta_4 CA_{it} + \beta_5 CTY_{it} + \beta_6 FS_{it} + \beta_7 FA_{it} + \beta_8 LEV_{it} + \epsilon_{it}$$

(Model 2)

Where:

Code	Description	Measurements
Dependent Variables		
OPP		Operating Performance-Profitability
SG	Sales growth	Dividing year-end sales by beginning of the year sales
OPL		Operating Performance-Liquidity
CR	Current ratio	Current assets/current liabilities
Independent Variables		
BS	Board size	Natural log of board size
BI	Board independent	Percentage of independent and non-executive directors to total number of directors
WD	Women director	Number of women directors divided by total board members
CA	CEO age	CEO age
CTY	CEO type	Family CEO code as 1, otherwise is zero for outside (non-family) CEO
Control Variables		
FS	Firm size	Total assets, natural

		log total assets value
FA	Firm age	Number of years firm incorporation, log firm age
LEV	Leverage	Book value of total debt over total assets
e	Error term	

4. Results and Discussion

4.1 Descriptive Statistics

The Table 1 presents the descriptive information on mean, median, standard deviation (SD), minimum and maximum values for the variables for year 2015 to 2016.

Table 1. Descriptive statistics results

Details	Mean	Median	SD	Min	Max
Sales growth (SG)	1.085	1.043	0.355	0.179	4.329
Current ratio (CR)	2.784	1.893	3.334	0.001	28.004
Board size (BS)	8.279	9	1.851	4	14
Board independent (BI)	3.677	3	1.089	3	9
Women director (WD)	0.766	0	1.026	0	5
CEO age (CA)	61.672	61	10.361	33	88
Firm size (FS)	21.130	21.122	1.438	14.337	25.251
Firm age (FA)	30.213	25	18.181	4	107
Leverage (LEV)	0.181	0.112	0.335	-0.128	5.290

The results for dependent variable SG (mean: 1.09) and CR (mean: 2.78) reflects on the average results of firms are with positive operating performance even during and after GST implementation. For corporate governance variables, the BS average is 8 with minimum is 4 and maximum is 14 present on optimal size of board of directors. The average BI is 3.67 with certain firms with maximum BI of 9 directors for an effective monitoring mechanism, practically all firms have met the minimum MCGG requirement. The WD mean of 0.77 shows that the women directors' number are growing in Malaysian listed firms. The average age (CA) of 61. For control variables, the average results for FS is 21.13 with minimum value of 14.34 and maximum value of 25.25. The firm age (FA) mean value is 30.21 this reflects most sample firms with an average age 30 years. The leverage mean value is 0.18 with minimum of -0.13 and maximum of

5.29 which indicates that the leverage debt level of the firms are manageable. Table 2 presents the frequency result for CEO type (CTY).

Table 2. Description of frequency result

Details	Status	Frequency	Percentage
CTY	Family CEO	149	28.11
	Non-Family CEO	381	71.89

The results in Table 2 indicates that that 71.89 percent CEO in the firms are non-family (outside) CEO.

4.2 Correlation Analysis

The following Table 3 and Table 4 presents the Pearson correlation results of independent and control variables with the dependent variables namely sales growth (SG) and current ratio (CR). Basically the coefficient results is less than 0.8, which indicates no multicollinearity issues between independent variables

Table 3. Sales growth correlation results

	SG	BS	BI	WD	CA	CT Y	FS	FA	LEV
SG	1.00								
BS	0.09**	1.00							
BI	0.08*		1.00						
WD	0.04	-0.07*	0.16**	1.00					
CA	0.10**	-0.07*	-0.05	0.16**	1.00				
CT Y	0.09**	-0.07*	-0.04	-0.03	0.04	1.00			
FS	0.09**	0.16**	0.14**	0.02	0.11*		1.00		
FA	-0.04	0.04	0.08*	-0.06	0.03	0.02	0.17*	1.0	
LEV	0.00	0.06	-0.01	0.08*	0.05	0.07*	0.09**	0.0	1.0

Table 4. Current ratio correlation results

	CR	BS	BI	WD	CA	CT Y	FS	FA	LEV
CR	1.00								
BS	-0.05	1.00							
BI	-0.04	-0.04	1.00						
WD	0.00	-0.07*	0.16**	1.00					
CA	0.20**	-0.07*	-0.05	0.16**	1.00				
CT Y	0.14**	-0.07*	-0.04	-0.03	0.04	1.00			
FS	0.21**	0.16**	0.14**	0.02	0.11**		1.00		
FA	0.01	0.04	0.08*	-0.06	0.03	0.02	0.17**	1.0	
LEV	-0.05	0.06	-0.01	0.08*	0.05	0.07*	0.09**	0.0	1.0

4.3 Regression Analysis

Table 5 presents the multiple regression results for the relationship between corporate governance and firm operating performance during and after GST implementation. The 265 listed firms are analyzed with support of OLS regression method for the five hypotheses in two regression models (Model 1 and Model 2) from 2015 to 2016. The Model 1 is representing the profitability (sales growth -SG) and Model 2 is representing liquidity position (current ratio – CR) of the firms. The Model 1 regression results show the corporate governance contribution in enhancing the sales growth during and after GST implementation, while Model 2 regression outcome reports the corporate governance excellence in the working capital management during and after GST implementation. The leverage is winsorized at 1 per cent and 99 per cent to overcome the outlier issues. The VIF results are below 5, thus, there is no presence of multicollinearity in the regression model.

Table 5. Regression results for Model 1 and Model 2

VARIABLES	Model 1 (SG)	Model 2(CR)
BS	-0.121* (0.0665)	0.131 (0.607)
BI	0.261* (0.140)	-0.0849 (1.278)
WD	0.0634 (0.129)	1.240 (1.175)
CA	0.0744** (0.0340)	0.961*** (0.310)
CTY	0.209** (0.0897)	3.400*** (0.819)
FS	-0.0221* (0.0114)	-0.433*** (0.104)
FA	-0.00882 (0.0249)	0.201 (0.227)
LEV	0.122 (0.107)	-0.923 (0.974)
Constant	0.860*** (0.475)	-3.193*** (4.333)
Observations	530	530
R-squared	0.043	0.098
Prob >F	0.000	0.000

*** p<0.01, ** p<0.05, * p<0.1

The board size (BS) has a negative significant relationship with sales growth (SG: $\beta = -0.121$, $p < 0.10$) and an insignificant relationship with credit ratio (CR: $\beta = 0.131$, $p > 0.10$), thus, the results partially support H1. The finding reveals that large board size does not enhance sales growth. Thus, to improve operating performance profitability, an ideal board size with an adequate combination of expertise

are required. However, for liquidity position even with an ideal number of 8 members on the board, board size does not contribute or play an important role in managing the liquidity position of firms during and after GST implementation. This paper suggests that it is not the number of board members that determines the effectiveness of corporate governance. The individual characteristics of corporate governance that need to be investigated to observe their role in effective management of firm operating performance in any business situation for a desirable outcome that favors the firm and shareholders' interest.

For board independent (BI) positive significant relationships are identified with SG ($\beta = 0.261$, $p < 0.10$) and an insignificant relationship with CR ($\beta = -0.0849$, $p > 0.10$). The finding supports the agency theory for sales growth that the outside directors do have interest in strengthening firm profitability to protect the shareholders' interest. The operating performance – sales growth (SG) relationship with BI results partially support H2. Thus, the outcome is similar to [18] that the BI has the expertise in enhancing or recovering performance, for example the SG (profitability) after the GST implementation period. Regardless, the BI's role is minimal to heighten the firm's liquidity position during implementation of new financial/ tax policies, especially for GST implementation which requires full attention on the business operation.

In Malaysia, even on average 77 percents of firms do have women on their board, the number of women on the board is still minimal. This could be the reason for the insignificant relationship identified for WD with SG ($\beta = 0.0634$, $p > 0.10$) and CR ($\beta = 1.240$, $p > 0.10$). The outcome of this study is consistent with [36] findings that WD merely fills up the numbers on the board. Thus, H3 is not supported. In the passage of time with strong encouragement from the authority, WD would be given an opportunity to play one of the main roles on the board rather than "a supporting role" in firm operating performance development and shareholders' wealth maximization. This encouragement would lead WD to be in an eminent role to discharge the governance duties effectively in firm value creation.

The CEO age (CA) has a positive significant relationship with operating firm performance for SG ($\beta = 0.0744$, $p < 0.05$) and CR ($\beta = 0.961$, $p < 0.01$). As predicted, the outcome supports H4. As mentioned by [41], CA contributes to firm performance. Therefore, CA supports the agency theory by aligning the interest between agent and principal. CA signifies a positive direction towards operating performance either in sales growth or

working asset management. Age is a plus factor to the CEO's emotional intelligence as increases the maturity and ability to decision making to lead the senior management team particularly during and after implementation of new policy or business practices that requires changes to firm operation. In sum, the senior CEO is an exemplary of being a good leader to effectively execute the financial and operational matters of firm.

The CEO type (CTY) is to investigate whether the CEO family or outside CEO has positive contribution to operating performance. The results reveal that more family CEO (CTY) has positive effect to profitability performance (SG: $\beta=0.209$, $p<0.05$) and liquidity performance (CR: $\beta=3.400$, $p<0.01$). The findings render support to assertion that family CEO with guidance and experience from the family members have greater privilege in increasing the firm operating performance (SG & CR). In general the CEO's energies are essential to firm [57]. According to [58] the non-family CEO is more accountable to firm performance. However the result of this paper reveals that family CEO too does contribute positively to the operating performance during and after GST implementation, thus, the findings support the [50] study. Practically, the result supports the agency theory that family CEO aligns the interest between the principal and the agent towards a positive direction to firm value maximization. The family CEO increases the market development and well-designed pricing policy that enhances the firm profitability and strengthening the fund management skill for a promising financial position of firms. In sum, it is apparent that family CEO has the ability to increase sales growth and has the capacity for effective working capital management even for example during/ after GST implementation period.

The firm size (FS) and operating firm performance relationship is significantly negative with coefficient of -0.0221 at p-value less than 0.10 for SG and coefficient of -0.433 at p-value less than 0.01 for CR. The results show that the smaller the firm size strive harder for better operating performance. The firm size influence firm performance due to economies of scale and market power [59]. The firm age (FA) has an insignificant relationship with SG ($\beta=-0.00882$, $p>0.10$) and CR ($\beta=0.201$, $p>0.10$) where firm age has no significant influence in operating firm performance. The LEV and SG relationship is not significant related ($\beta=0.122$, $p>0.10$). Similarly, LEV and CR has insignificant relationship ($\beta=-0.923$, $p>0.10$).

4.3.1 Robustness Regression Analysis

Table 6 presents the robustness check results to support the regression findings in Table 5. The robustness check is to observe behavior of coefficients when there is any addition or removal of regressors. This paper has included the lag operating performance variable as additional independent variable to determine the robustness of the relationship between operating performance (SG & CR) with the corporate governance variables. The lagged independent variable (1 year) LagSG and LagCR is the previous year dependent variable (operating performance) that possible to influence the current operating performance. Thus, the Model 3 has lagSG to determine the robustness of the Model 1 regression results and Model 4 has lagCR to determine the robustness of the Model 2 regression results. The findings shown in Table 6 indicates that with the additional one regressors (LagSG and LagCR), the regression results in terms of significant level and directions of relationship in Model 3 and 4 are similar to Model 1 and 2 regression results. Thus, this provides justification on the robustness of the regression results. In addition, the LagSG and LagCR do not have significant relationship with SG and CR respectively. This reflects that previous SG and CR do not influence the current year SG and CR.

Table 6. Robustness regression analysis

VARIABLES	Model 3 (SG)	Model 4 (CR)
BS	-0.119* (0.0666)	0.176 (0.607)
BI	0.261* (0.140)	-0.0850 (1.277)
WD	0.0601 (0.129)	1.299 (1.175)
CA	0.0738** (0.0340)	0.987*** (0.311)
CTY	0.210** (0.0898)	3.332*** (0.820)
FS	-0.0225** (0.0114)	-0.426*** (0.104)
FA	-0.00829 (0.0249)	0.216 (0.227)
LEV	0.122 (0.107)	-1.014 (0.975)
LagSG/LagCR	-0.00885 (0.0151)	-0.0752 (0.0563)
Constant	0.871*** (0.475)	-3.012*** (4.332)
Observations	530	530
R-squared	0.044	0.101
Prob >F	0.000	0.000

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

5. Conclusion

Basically there are many studies focus mainly the link between firm performance and corporate governance. From the observation of firm operating performance in year 2015 and 2016 (Figure 1.1), indicate that firms have shown their commitment and move forward in sustaining the operating performance even with the GST implementation. These firms should be supported by the corporate governance, however need empirical evidence to investigate corporate governance relationship with operating performance (profitability: SG and liquidity: CR). The regression results explicitly show that effective corporate governance namely small/ideal board size, board independent, more senior CEO and family CEO contribute to positive sales growth (profitability position). Further, on the positive side to achieve an exceptional working capital position (measured by current ratio) can be of great value by having senior and family CEO. Besides corporate governance role renowned for monitoring mechanism, the results provide evidence on corporate governance involvement in financial and operational matters for firm value creation. The findings of study contribute to internal and external stakeholders on the corporate governance challenges for ensuring an effective firm operation during and after GST implementation. For future study, it is recommended to study the characteristics of women directors in detail, rather to focus on the number of women directors with operating performance to determine the WD contribution in operating performance.

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