CEO Role in Operating Performance during the GST and SST Indirect Tax Periods in Malaysia

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Abstract-The paper investigates the CEO role in achieving a desirable operating performance during GST and SST periods. This paper used Ordinary Least Squares (OLS) regression to determine the CEO role in in operating performance during the combined GST and SST periods and individual GST period including SST period for 249 listed firms mainly from manufacturing and service sectors. It is empirically evidence with the support of upper echelon theory assumption that CEO age and CEO education have negative association with operating performance (profitability and liquidity) during the GST and SST periods. The younger CEO has significant role in achieving positive operating performance. The accounting or finance CEO education not in every situation plays critical role in attaining sound operating performance. The CEO ownership has negative influence to profitability and positive influence to liquidity position of the firm. Based on the outcome, CEO ownership should reduce any agency issues by achieving a desirable operating performance (profitability and liquidity). The relationship between CEO type and operating performance are positive for profitability and negative for liquidity. Generally, the CEO whether within the family or outsider require to boost the profitability and liquidity position of firms as these components of operating performance are importance for firm survival and growth even during GST and SST periods. In sum, the novelties of this paper reports that CEO role is significant in line with upper echelon theory for effective decision making, managing and making good choices in business for achieving a better operating performance during the GST and SST periods.

Keywords-Goods and Services Tax, Corporate Governance, Chief Executive Officer, Operating Performance, Sales and Services Tax

1. Introduction

Malaysia is the only country that has reversed the tax revolution from Goods and Services Tax (GST) to Sales and Service Tax (SST) [1]. One of the purposes for the tax reform from GST to SST in 2018 is to relieve people burden of rising goods and service prices. The GST and the SST are both the

consumption taxes for the purchases of goods and services [2]. The levy on consumer purchases for the goods and services is a consumption tax which serves as source of government revenue [2]. The indirect taxes (customs duties, excise duty, GST and SST) are under the administration of the Royal Malaysian Customs Department (RMCD) [3]. The SST is a single-stage tax and GST is a multi-stage tax in a way is more complicated than SST in terms of administration and cost of compliance [4].

The GST was established in 2015 with the goal of increasing income and reducing the country's budget deficit, however replaced with the SST, which is expected to lower living costs, especially for the lower and middle income groups [5]. As matter of fact, will there be any benefit for firms, particularly listed firms in Malaysia as one of the primary tax revenue producers to the government for the country's economic development? Do the listed firms' operating results suffer as a result of the tax reform? Firms urge for a relevant systems during adoption to avoid any unfavorable consequences to their operating performance e.g. pricing policy and liquidity position, which could influence the shareholders' value [6]. The wealth of shareholders is protected by the positive operating performance resulting from smooth business activities under the involvement of corporate governance requirement [7]. The corporate governance is essential to financial performance of firms [8]. Generally, an efficient operating performance during the indirect tax transition necessitates the cooperation of those in charge of governance particularly the Chief Operating Officer (CEO). The chief executive officer (CEO) is perhaps the most influential person in a public company. [9]. The CEO has an impact on the company's policies, decisions, and outcomes [10]. The CEO of the company has important role in strategic, tactical and operational level in the supply chain management. Therefore, CEO is directly responsible for the firm's financial and operational matters have greater role

and power during this indirect tax periods (GST to SST)

Generally require a well-designed system to organize and control the business operation during indirect tax transition GST to SST with the support from CEO. In addition, the involvement of CEO strengthens the corporate governance position to engage best practices in the business operations during the indirect taxes periods (GST and SST). There are studies on CEO with firm performance [e.g.11;12;13;14;15;16]. In addition, [7] study investigates corporate governance and operating performance during GST period. However, no previous studies undertaken research on CEO role in operating performance during the GST and SST indirect tax periods. This paper takes the privilege to investigate the CEO role on operating performance during the GST and SST periods. Furthermore, we anticipates that the role of CEO the executive leader of the corporate board possible to function effectively in designing a good system for achieving promising operating performance (profitability and liquidity) during the indirect tax conversion from GST to SST that validates on company's tax reform acceptance. The objective of this paper is to investigate the CEO role (age, expertise, ownership and type) in operating performance (profitability and liquidity) during the combined (GST and SST) indirect tax periods and individual GST period including SST period. The outcome of this paper is important to regulators, academics and management of the companies as it will determine the CEO role in operating performance during the GST and SST periods.

Following the introduction section, the paper is organized as follows. The literature review is in Section 2, and the methodology for this paper in Section 3. Section 4 discusses the findings, while Section 5 provides a summary of the research.

2. Literature review

2.1 Upper Echelons Theory

Organizational outcomes, including strategies and effectiveness, are seen as reflections of the values and cognitive bases of the organization's powerful actors [17]. In line with social psychology theories, individual psychological characteristics and team processes play a role in executive decision-making [18]. According to upper echelons theory, decision making is inherently an interpretive activity; therefore personal viewpoints will play a vital role in senior executives' decision making and influence

their choices [19]. Therefore, the CEO roles should play important role in making decisions for the business operations during the indirect tax periods in order to avoid any negative consequences to the operating performance (profitability and liquidity). Early empirical study on the upper echelons theory study at the effects of top management team (TMT) variability in observable background variables including age, functional track educations and other work experiences [18]. On the ground of functional track, besides the CEO age, type and education representing the CEO role variables, this paper investigates the CEO ownership relationship with operating performance under the assumptions of upper echelon theory. Thus, from the support of upper echelons theory, the CEO's values and cognitive base plays an important role in promoting best practices in the system of operations decision making during the and SST periods.

2.2 CEO Age with Operating Performance

The CEO age is one prominent demographic measurement of firm performance [20], which is important in the decision-making process [21]. In line with upper echelon theory on values and cognitive bases [17], the CEO age factor is important for the decision making on operating performance during the implementation of GST and SST periods. [7] study show that the operating firm performance and CEO age is significantly and positively associated as CEO age plays an influential role in firm decision making related to improving firm performance.[11] study point out that CEO age are positively related to firm performance of Pakistan's nonfinancial sector listed firms. In the same vein, [16] report positive relationship between future firm performance and CEO age.

On contrary, [14] fail to reveal empirical evidence supporting the relationship with the age of the CEO and firm performance. Indeed, the link between youthful management and stronger business growth evidenced by putting more skilled young people in more top positions [22]. [15] study identify negative relationship with CEO age with firm performance (Tobin Q), reflects that the firm's Tobin's Q tends to decrease as CEOs age. Younger managers should also be more educated and have more up-to-date technological skills [23]. Younger senior executives are more likely than older executives to devise fresh and inventive initiatives [24]. In addition, [8] study find that greater board director's age has a detrimental impact on the firm's success. Younger CEOs have a beneficial impact on firm performance, which is often linked to their willingness to take on greater risk and make substantial structural changes [8]. From the findings of the prior studies and upper echelon theory, the hypothesis as follows: that:

H1: There is an association between CEO age and operating performance during the GST and SST periods.

H1a: There is an association between CEO age and operating performance during the GST period.

H1b: There is an association between CEO age and operating performance during the SST period.

2.3 CEO Expertise with Operating Performance

The level of education of the CEO is also a significant upper echelon theory element [25]. The managers' cognitive ability reveals the highest and most positive association to managers' strategic thinking competency [26]. Situations with complicated problems, CEOs with greater levels of education and business degrees are expected to come up with a wider choice of inventive solutions [24]. Thus, the CEO education is important to strengthen the cognitive ability to make better decision making in achieving a better operating performance during the GST and SST periods.

The [27] study indicate that a significantly positive association between CEO education and firm performance. In a similar vein, both firm strategic initiatives and future performance are favorably link with CEO formal education [16]. Furthermore, [12] confirm that CEO education relationship is significant and positive with firm performance. However, [28] find that CEO education in business is unrelated to firm performance. [29] study show that board expertise fail to provide any correlation with firm performance. Because top executives are often many years beyond their formal schooling, it may appear implausible that educational experiences would influence managerial judgments [25]. From the two opposing findings, we hypothesize that:

- H2: There is an association between CEO expertise and operating performance during the GST and SST periods.
- H2a:There is an association between CEO expertise and operating performance during the GST period.
- H2b:There is an association between CEO expertise and operating performance during the SST period.

2.4 CEO Ownership with Operating Performance

CEO ownership refers to the number of shares that the firm CEO possesses as a percentage of the total shares owned by all corporate shareholders [30]. [31] reports that managerial and shareholders' interests get aligned when the managerial ownership increases. As having share ownership in the company, there is sense of ownership values that

plays important role for the CEO decision making which possibly supports the upper echelon theory.

[32] report that the rise in CEO ownership level will drive him towards excelling the firm management contributing to more firm performance and value. [11] reveal that CEO ownership play a significant role in improving firm performance. [13] study report the positive relationship between CEO ownership and firm performance. The stronger a CEO's incentive, the higher the CEO interest in the company to efficiently structure assets-in-place and recognize potentially profitable opportunities [13].

On the contrary, [33] reveal that there is a negative significant relationship among CEO ownership and firm performance. Similarly, [34] study document that CEO incentives are negatively related to performance. As a result, the CEO may have an effect over the appointment of outside directors, thereby turning the board into a rubber stamp [34]. [35] study on 100 top public listed firms for year 2013, conclude that the managerial ownership has negatively significant association with ROA. This negative impact could be interpreted that the increasing shares of CEOs can reduce the performance of the board of directors. However, [36] investigate the association between CEO characteristics and firm performance among 37 firms in Nigeria. The authors indicate that CEO ownership has no significant effect on firm performance. From the explanation above, we hypothesize that:

- H3: There is an association between CEO ownership and operating performance during the GST and SST periods.
- H3a: There is an association between CEO ownership and operating performance during the GST period.
- H3b: There is an association between CEO ownership and operating performance during the SST period.

2.5 CEO Type with Operating Performance

CEO type means if the CEO is a family or outside CEO [7]. According to [37] asserts the family CEO has good family way of life (cultures), high sense unity of family and affinity within the firms. On the other hand, firm run by outside managers (professional) are more efficient in generating net income than managers who are owners, and family firms managed by owners perform less favorably [38]. Therefore, the values and cognitive base assumptions of upper echelon theory [17] presumably explains the nature of the CEO type for effective decision making for achievable operating performance during the GST and SST periods.

Limited studies have investigated the correlation between CEO type and firm performance. [39] discover that firms have CEO

family members may improve firm performance better relative to outside CEOs. Similarly, [40] opine that family CEOs with a lesser concentration of family ownership have a better performance in the event of an external hazard. [37] shows that the CEO of the family enhanced firm performance greater than outside CEO for Malaysian family listed firms during the period from 2003 to 2007. Besides, based on 265 firms during and after the period of implementation of the GST in 2015 and 2016, [7] report that family CEO is positively related to increasing operating performance (proxied by sales growth and current ratio) because of family CEOs are relatively motivated and committed to function at their best with limited opportunistic behaviour.

Conversely, [41] study highlight that family CEO has negative significant relationship with firm performance. Outside directors, who are respected for their reputation, knowledge, and managerial experience, are beneficial to privately held and businesses family-controlled [41]. organizations that have an inside succession in the office of corporation president likely to have less organizational change in the executive role than organizations that have an outside succession [42]. In addition, [43] reveal that family involvement in management (including family CEO) is not directly influence the firm performance. In line with the previous studies, the following hypothesis is developed:

H4: There is an association between CEO type and operating performance during the GST and SST periods.

H4a: There is an association between CEO type and operating performance during the GST period. H4b: There is an association between CEO type and operating performance during the SST period.

3. Methodology

For determining the relationship between CEO role and operating performance during the GST and SST periods, data from the non-financial sector of Malaysian listed companies was collected from the Bursa Malaysia during the period 2015 to 2019. As SST implementation effective from 1 September 2018, firms were selected with financial year ended either as at 30 September, 31 October, 30 November or 31 December 2018. The 249 sample firms (258 firms - 9 firms with missing data) were from manufacturing and service sectors (consumer product and services: 83 firms; industrial product and services: 105 firms; telecommunications and media: 24 firms; transportation and logistics: 13 firms; technology: 17 firms; utility: 7 firms).

The operating performance covers profitability measures revenue's capacity to cover costs, whereas liquidity measures the company's ability to satisfy short-term liabilities or

commitments [6]. The dependable variables for this paper are earnings per share (EPS) representing profitability (OPP) and cash ratio (CashR) representing liquidity (OPL). The EPS reflects the amount of income generated by the outstanding shares [44] whereas the CashR shows how much money is available to pay current obligations or commitments [45]. The independent variables for the study are CEO age (CA), expertise (CE), ownership (CO) and type (CTY). The control variables for this study are firm size (FS), leverage (LEV), firm age (FA), audit firm size (AFS) and growth (GRW). There is positive and significant relationship between firm size (FS) and performance The financial leverage (LEV) and firm performance have negative and significant relationship [47]. According to [48] study firm age (FA) has significant negative association with firm performance. There is a relationship between audit firm size (AFS) with operating performance [49]. There is significant positive relationship growth (GRW) with firm performance [50]. Table 1 shows the measurements for this paper.

The regression analysis to determine the relationship of CEO role and operating performance profitability (OPP) and liquidity (OPL) for GST and SST periods are organized as follows. First, to determine the overall CEO relationship with operating performance during the indirect tax periods, the sample years are combined for GST and SST periods (OPP: Model 1a; OPL: Model 2a). Second, this paper analyze separately for GST period (2015 to 2016) and SST period (2018 to 2019) the association of CEO with operating performance (GST: OPP in Model 1b and OPL in Model 2b; SST: OPP in Model 1c; and OPL in Model 2c). The regression models are as follows:

Combine indirect tax periods (GST [year: 2015 to 2016] and SST [year: 2018 to 2019]

 $\begin{aligned} OPPit &= \beta 0 + \beta 1CAit + \beta 2CEit + \beta 3COit + \beta 4CTYit \\ &+ \beta 5FSit + \beta 6LEV + \beta 7FAit + \beta 8AFSit + \beta 9GRWit \\ &+ e \end{aligned}$

Model 1a

GST (year: 2015 n 2016)

 $\begin{aligned} OPPit &= \beta 0 + \beta 1CAit + \beta 2CEit + \beta 3COit + \beta 4CTYit \\ &+ \beta 5FSit + \beta 6LEV + \beta 7FAit + \beta 8AFSit + \beta 9GRWit \\ &+ e \end{aligned}$

Model 1b

SST (2018 n 2019)

 $\begin{aligned} OPPit &= \beta 0 + \beta 1CAit + \beta 2CEit + \beta 3COit + \beta 4CTYit \\ &+ \beta 5FSit + \beta 6LEV + \beta 7FAit + \beta 8AFSit + \beta 9GRWit \\ &+ e \end{aligned}$

Model 1c

Combine indirect tax periods (GST [year: 2015 to 2016] and SST [year: 2018 to 2019]

OPLit = β 0 + β 1CAit + β 2CEit + β 3COit + β 4CTYit + β 5FSit + β 6LEV + β 7FAit + β 8AFSit + β 9GRWit + e

Model 2a

GST (year: 2015 n 2016)

 $\begin{aligned} OPLit &= \beta 0 + \beta 1CAit + \beta 2CEit + \beta 3COit + \beta 4CTYit \\ &+ \beta 5FSit + \beta 6LEV + \beta 7FAit + \beta 8AFSit + \beta 9GRWit \\ &+ e \end{aligned}$

Model 2b

SST (2018 n 2019)

 $\begin{aligned} &OPLit = \beta 0 + \beta 1CAit + \beta 2CEit + \beta 3COit + \beta 4CTYit \\ &+ \beta 5FSit + \beta 6LEV + \beta 7FAit + \beta 8AFSit + \beta 9GRWit \\ &+ e \end{aligned}$

Model 2c

Table 1. The Study Variables Measurements

Code	Description	Measurements
Dependen	t Variables	·
OPP		Operating Performance- Profitability
EPS	Earnings per share	Net income divided by weighted average of common shares outstanding
OPL		Operating Performance- Liquidity
CashR	Cash ratio	Ratio of cash deposit to current liabilities. Cash Deposit (cash equivalents + marketable securities)
Independe	ent Variables	
CA	CEO age	Age of the CEO at the end of each financial year
CE	CEO expertise	Dummy variable, which equals "1" if CEO has accounting or financial qualifications and otherwise is "0"
CO	CEO ownership	Percentage of shares held by a CEO
CTY	CEO type	Dummy variable, which equals "1" if CEO is family and otherwise is "0" for nonfamily (outside) CEO
Control V	ariables	
FS	Firm size	Natural logarithm of total assets
LEV	Leverage	Total liabilities divided by total assets
FA	Firm age	Natural logarithm of years firm incorporation
AFS	Audit firm size	Dummy variable, which equals "1" if firms audited by Big 4 auditors, and 0 otherwise
GRW	Growth	Book value of equity (Total assets minus total liabilities divided by the total number of outstanding shares) divided by the market share price
e	Error term	

4.0 Results and Analysis

4.1 Descriptive Statistics

Table 2 shows the details of the descriptive statistics for combined periods of GST and SST periods in Panel A and Panel B for GST period and Panel C for SST period. The descriptive statistics covers the mean, standard deviation (std. dev.), median, minimum values (min) and maximum values (max) for the variables of the study. Based on Panel A, EPS

and CASHR on average the value is 0.099 and 0.967 for combined GST and SST periods. The average CEO age (CA) is 56 years, CEO with accounting expertise (CE) at 23 percent mean value, CEO ownership (CO) of 17.3 percent and nearly 42 percent are family CEO (CTY). For control variables, the firm size (FS) is at 13.152 mean value with leverage of 37 percent and average firm age (FA) of 26 years. Almost 46 percent are audited by big 4 firms (AFS) and average firm growth (GRW) of 1.572.

Table 2. Variables Descriptive Statistics

Variables	Mean	Std. Dev.	Median	Min	Max
EPS	0.099	0.220	0.050	-0.289	0.879
CASHR	0.967	1.427	0.440	0.021	6.390
CA	56.722	9.133	57.000	38.000	74.000
CE	0.229	0.420	0.000	0.000	1.000
CO	0.173	0.205	0.061	0.000	0.646
CTY	0.426	0.495	0.000	0.000	1.000
FS	2,323,338	5,642,906	430,272	45,485	25,581,200
Ln FS	13.152	1.571	12.972	10.725	17.057
LEV	0.370	0.201	0.343	0.057	0.832
FA	26.394	12.790	22.656	9.010	55.400
Ln FA	3.159	0.481	3.120	2.198	4.015
AFS	0.461	0.507	0.000	0.000	3.000
GRW	1.572	2.023	0.900	0.210	10.020
Panel B: GST Period (2015 a					
Variables	Mean	Std. Dev.	Median	Min	Max
EPS	0.114	0.218	0.058	-0.289	0.879
CASHR	0.936	1.345	0.463	0.021	6.390
CA	56.096	8.841	56.000	38.000	74.000
CE	0.223	0.417	0.000	0.000	1.000
CO	0.175	0.205	0.071	0.000	0.646
CTY	0.424	0.495	0.000	0.000	1.000
FS	2,246,646	5,517,609	390,388	45,485	25,581,200
Ln FS	13.109	1.570	12.875	10.725	17.057
LEV	0.365	0.197	0.337	0.057	0.832
FA	24.978	12.763	20.932	9.010	55.400
Ln FA	3.093	0.501	3.041	2.198	4.015
AFS	0.460	0.499	0.000	0.000	1.000
GRW	1.534	1.931	0.900	0.210	10.020
Panel C: SST Period (2018 ar					
Variables	Mean	Std. Dev.	Median	Min	Max
EPS	0.084	0.220	0.039	-0.289	0.879
CASHR	0.998	1.506	0.388	0.021	6.390
CA	57.347	9.383	58.000	38.000	74.000
CE	0.235	0.424	0.000	0.000	1.000
CO	0.172	0.206	0.057	0.000	0.646
CTY	0.428	0.495	0.000	0.000	1.000
FS	2,400,029	5,770,013	476,036	45,485	25,581,200
Ln FS	13.195	1.572	13.073	10.725	17.057
LEV	0.375	0.206	0.354	0.057	0.832
FA	27.810	12.672	23.981	9.010	55.400
Ln FA	3.224	0.452	3.177	2.198	4.015
AFS	0.462	0.515	0.000	0.000	3.000
GRW	1.609	2.113	0.880	0.210	10.020

Note: Table 1 summarizes the definitions of variables.

4.2 Correlation Analysis

Table 3 displays Pearson correlation matrix and variance inflation factors (VIF) test for all research variables. The Pearson correlation matrix results are in three sections, Panel A represents for the combined GST and SST periods, Panel B represents the GST period and Panel C represents the SST period. The result shows that the correlation coefficients between all variables value are small suggesting the absent of multicollinearity problem. [51] confirm that if the maximum correlation coefficients equal to \pm 0.80, multicollinearity did not affect the results' validity. The result in Table 3 also shows that the variables VIF values do not exceed 10, this suggests that no serious issue for the multicollinearity as VIF values are less than 10 [52]. To recognize the existence of heteroscedasticity, Breusch and Pagan Lagrangian Multiplier tests were utilized. The result shows that the data has heteroscedasticity issue. In addition, Durbin–Watson test was used to evaluating autocorrelation; the results show that there is an autocorrelation problem. Thus, this study used the OLS regression with robust standard errors to control the heteroscedasticity and autocorrelation problems.

 Table 3. Pearson Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	VIF
(1) EPS	1.000											
(2) CASHR	0.033	1.000										
(3) CA	-0.096***	0.044	1.000									1.162
(4) CE	-0.069**	-0.106***	-0.225***	1.000								1.193
(5) CO	-0.180***	0.080**	0.192***	-0.088***	1.000	1.000						1.328
(6) CTY	-0.113***	-0.031	0.148***	-0.126***	0.430***	1.000	1.000					1.364
(7) FS	0.438***	-0.127***	0.010	0.068**	-0.212***	-0.193***	1.000	1.000				1.583
(8) LEV	0.005	-0.551***	-0.132***	0.104***	-0.126***	-0.127***	0.282***	1.000	1.000			1.181
(9) FA	0.241***	-0.021	0.065**	0.054* 0.108***	-0.150*** -0.229***	-0.166***	0.265*** 0.514***	0.046	1.000	1 000		1.213
(10) AFS	0.328***	0.035	0.020 -0.119***		-0.229***	-0.206*** -0.187***	0.314***	0.120***	0.309***	1.000	1.000	1.527
(11) GRW	0.416***	-0.028		-0.124***	-0.118****	-0.18/***	0.1/5****	0.207***	0.040	0.201***	1.000	1.240
Panei B: Pearso Variables	n Correlation M			(4)	(5)	(6)	(7)	(9)	(0)	(10)	(11)	VIF
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	VIF
(1) EPS (2) CASHR	1.000 0.037	1.000										
(2) CASHK (3) CA	-0.097**	0.020	1.000									1.162
(4) CE	-0.064	-0.078*	-0.216***	1.000								1.102
(4) CE (5) CO	-0.196***	0.091**	0.165***	-0.100**	1.000							1.328
(6) CTY	-0.120***	-0.033	0.142***	-0.147***	0.461***	1.000						1.364
(7) FS	0.451***	-0.114**	-0.011	0.064	-0.252***	-0.216***	1.000					1.583
(8) LEV	-0.016	-0.537***	-0.114**	0.067	-0.101**	-0.084*	0.275***	1.000				1.181
(9) FA	0.278***	0.003	0.069	0.038	-0.175***	-0.180***	0.284***	0.010	1.000			1.213
(10) AFS	0.376***	0.054	0.011	0.135***	-0.219***	-0.204***	0.525***	0.088*	0.319***	1.000		1.527
(11) GRW	0.421***	-0.023	-0.112**	-0.143***	-0.139***	-0.198***	0.184***	0.211***	0.074*	0.219***	1.000	1.240
Panel C: Pearso	n Correlation M	atrix (SST Perio	d)									
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	VIF
(1) EPS	1.000											
(2) CASHR	0.033	1.000										
(3) CA	-0.086*	0.062	1.000									1.162
(4) CE	-0.073*	-0.131***	-0.237***	1.000								1.193
(5) CO	-0.167***	0.071	0.219***	-0.077*	1.000							1.328
(6) CTY	-0.105**	-0.029	0.155***	-0.106**	0.400***	1.000						1.364
(7) FS	0.432***	-0.141***	0.027	0.071	-0.172***	-0.171***	1.000					1.583
(8) LEV	0.029	-0.565***	-0.152***	0.138***	-0.148***	-0.168***	0.288***	1.000				1.181
(9) FA	0.228***	-0.051	0.044	0.069	-0.126***	-0.155***	0.242***	0.077*	1.000			1.213
(10) AFS	0.284***	0.019	0.028	0.083*	-0.239***	-0.208***	0.503***	0.151***	0.307***	1.000		1.527

Note(s): *** p<0.01, ** p<0.05, * p<0.1. Table 1 summarizes the definitions of variables

4.3 Regression Results Analysis and Discussion

Table 4 reports the results of our multiple regression analysis for combined GST and SST periods, GST period and SST period for the association of CEO role with operating performance representing profitability and liquidity using the OLS regression with robust standard errors.

The CEO age (CA) relationship with operating performance shows a negative significant relationship between CA and OPP for combined (GST and SST) periods ($\beta = -0.002$), GST period (β = -0.003) and SST period (β = -0.002). As for CA with OPL, discover significant negative relationship for combined periods ($\beta = -0.007$) and insignificant relationship for GST period ($\beta = -0.009$) and SST period (β = -0.006). Indeed, H1 is supported and H1a including H1b are partially supported. The negative relationship outcome is similar to [15] study, revealing that younger CEO has positive impact to operating performance. The younger executives should also be more educated and have more current technology abilities [23] which further support the cognitive base and values of executives as powerful actors in upper echelon theory [17] for effective decision making. Therefore, younger CEO plays essential role in strengthening the operating performance during the GST and SST periods.

The relationship between CEO expertise (CE) particularly in accounting or finance fields shows mostly negative relationship for combined periods for OPP ($\beta = -0.030$) and OPL ($\beta = -0.257$), GST period ($\beta = -0.251$) and SST period ($\beta = -0.248$) except for OPP GST period (β = -0.027) and SST period (β = -0.035). The findings support H2 and partially support for H2a and H2b. Although the accounting or finance fields CE has negative relationship with operating performance, this paper still support the upper echelon theory cognitive base assumption that education is still relevant for CEO decision making effectiveness. Generally, the significant negative relationship between CE and operating performance indicate that accounting or finance fields education alone is insufficient for CEO decision making for a better operating performance during GST and SST periods. Basically the findings agreeable with [25] statement given that top executives generally have many years of experience beyond their formal education, it may seem improbable that educational experiences would influence managerial decisions.

There is negative and significant association between CEO ownership (CO) with OPP during the combined indirect tax periods (β = -0.074) including GST period (β =-0.067) and SST period (β =-0.080). This finding similar to [33], the higher the CEO ownership has adverse impact for the firm profitability. Conversely, OPL for combined indirect tax periods (β =0.626) and GST

period (β =0.691) have significant positive relationship with CO except for SST period (β =0.569) in line with [13] study. As a result, H3 and H3a are supported whereas H3b is partially supported. The outcome provides evidence that firms urge to practice check and balance for CEO shares ownership. As to achieve CEO effectiveness in functionality and decision making in line with upper echelon theory in order to attain a promising operating performance (profitability and liquidity) during the GST and SST periods.

The CEO type (CTY) has positive and significant relationship with OPP for combined indirect tax periods (β = 0.029) and GST period exception of insignificant with $(\beta = 0.033)$ relationship during the SST period (β =0.024). Basically the outcome supports the [37] study, where family CEO has better profitability during the combined indirect tax periods including the GST periods. Based on the negative and significant relationship between CTY and OPL for combined indirect tax periods (β =-0.302). GST period (β =-0.238) and (β =-0.373) which is consistent with [41] study. From the findings, the family CEO does not play effective role in liquidity position of the firm. The sample observations shows that around 40 percent are family CEO, thus the family CEO requires to emphasize equally on the firm profitability and liquidity performance during the GST and SST periods as to build the stakeholders confidence in business operations. Thus, the family CEO personal viewpoints should emphasized on essentiality of firms profitability and liquidity position for effective decision making, as mentioned on [19] study on the personal viewpoint vitality of senior executives decision making and choice influences in accordance with upper echelons theory.

For control variables, the firm size (FS) shows a significant positive relationship only with OPP for combined periods including GST period and SST period that support the [46] study. In line [47] study leverage opine a negative and significant relationship for OPP and OPL consistently for combined periods together with individual GST period and SST period. This indicates that firms with lower leverage have higher operating performance. The positive and significant relationship between firm age and OPP for combined and individual tax periods highlights that older firms have good track of profitability records fail to support [48] study. The mostly positive significant relationship between audit firm (AFS) with OPP and OPL for combined and individual tax periods for GST and SST supports the outcome of [49] study. Firms audited by big 4 firms have promising operating performance for both GST and SST periods. Finally, growth has positive and significant relationship with OPP for combined and individual tax periods and OPL for combined tax period similar to [50] study.

Table 4. OLS Regression with Robust Standard Errors Results

Variables	Model (1a) OPP (EPS)- Combined GST and SST Periods	Model (1b) OPP (EPS)- GST Period	Model (1c) OPP (EPS)- SST Period	Model (2a) OPL (CASHR)- Combined GST and SST Periods	Model (2b) OPL (CASHR)- GST Period	Model (2c) OPL (CASHR)- SST Period
CA	-0.002***	-0.003***	-0.002**	-0.007*	-0.009	-0.006
CA	(0.001)	(0.001)	(0.001)	(0.004)	(0.006)	(0.006)
CE	-0.030*	-0.027	-0.035	-0.257***	-0.251**	-0.248**
CE	(0.016)	(0.023)	(0.023)	(0.085)	(0.121)	(0.122)
CO	-0.074***	-0.067*	-0.080**	0.626**	0.691*	0.569
CO	(0.027)	(0.041)	(0.036)	(0.250)	(0.357)	(0.355)
CTY	0.027)	0.033**	0.036)	-0.302***	-0.238*	-0.373***
CII	(0.011)	(0.016)	(0.016)	(0.093)		(0.139)
FS	0.011)	0.049***	0.052***	-0.037	(0.124) -0.022	-0.052
12	(0.005)	(0.007)	(0.007)			
LEV	-0.219***	-0.232***	-0.206***	(0.029) -4.052***	(0.042) -3.800***	(0.041) -4.295***
LEV						
E.4	(0.031)	(0.042)	(0.044)	(0.243)	(0.327)	(0.367)
FA	0.059***	0.051***	0.068***	-0.070	-0.033	-0.109
	(0.013)	(0.017)	(0.022)	(0.091)	(0.128)	(0.132)
AFS	0.020*	0.041**	-0.001	0.363***	0.316**	0.413***
	(0.011)	(0.016)	(0.016)	(0.098)	(0.140)	(0.139)
GRW	0.040***	0.042***	0.039***	0.026*	0.033	0.017
	(0.005)	(0.007)	(0.007)	(0.015)	(0.023)	(0.021)
Constant	-0.544***	-0.513***	-0.624***	3.391***	3.007***	3.854***
	(0.066)	(0.092)	(0.096)	(0.509)	(0.751)	(0.737)
Year & industry	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	996	498	498	996	498	498
\mathbb{R}^2	0.407	0.415	0.402	0.344	0.327	0.365
F-test	21.88	14.36	11.37	19.82	12.35	12.39
Prob > F	0.000	0.000	0.000	0.000	0.000	0.000

4.4 Robustness Regression Analysis

Further, an additional analysis with alternate variable measurement for the CEO age was carried out to determine the robustness for the Models 1a, 1b,1c, 2a, 2b, and 2c of the main analysis in order to see if the results are comparable to the study's

primary models. For the additional analysis, the CEO age continuous variable replaced with log CEO age (LnCA) as alternative measurement. The outcome of the regression results in Table 5 is almost with same direction of relationships with regression results of the main analysis in Table 4. Therefore, this provides evidence that the regression results for this paper is robust.

 Table 5 . OLS Regression Results for Alternative Measurement

Variables	Model (1a) OPP (EPS)- Combined GST and SST Periods	Model (1b) OPP (EPS)- GST Period	Model (1c) OPP (EPS)- SST Period	Model (2a) OPL (CASHR)- Combined GST and SST	Model (2b) OPL (CASHR)- GST Period	Model (2c) OPL (CASHR)- SST Period
LnCA	-0.127***	-0.135***	-0.116**	Periods -0.423*	-0.484	-0.373
LIICA	(0.035)	(0.048)	(0.051)	(0.225)	(0.317)	(0.321)
CE	-0.030*	-0.026	-0.035	-0.259***	-0.252**	-0.250**
CE	(0.016)	(0.023)	(0.023)	(0.085)	(0.121)	(0.123)
CO	-0.074***	-0.067*	-0.080**	0.630**	0.694*	0.573
CO	(0.027)	(0.041)	(0.036)	(0.250)	(0.357)	(0.355)
CTY	0.028**	0.041)	0.023	-0.305***	-0.242*	-0.375***
CII	(0.011)	(0.016)	(0.016)			
FS	0.011)	0.049***	0.052***	(0.093) -0.036	(0.124) -0.022	(0.139) -0.052
12		(0.007)				
LEX	(0.005) -0.219***	-0.231***	(0.007) -0.207***	(0.029)	(0.042) -3.798***	(0.041) -4.298***
LEV	v. -	··		-4.053***		, .
ГА	(0.031) 0.059***	(0.042) 0.051***	(0.044) 0.067***	(0.243) -0.071	(0.327) -0.034	(0.367)
FA						-0.111
A EG	(0.013)	(0.017)	(0.022)	(0.091)	(0.128)	(0.132)
AFS	0.020*	0.041**	-0.001	0.364***	0.317**	0.413***
CDW	(0.011)	(0.016)	(0.016)	(0.098)	(0.140)	(0.139)
GRW	0.040***	0.042***	0.039***	0.026*	0.033	0.017
_	(0.005)	(0.007)	(0.007)	(0.015)	(0.023)	(0.021)
Constant	-0.167***	-0.116***	-0.279***	4.673***	4.461***	4.991***
	(0.143)	(0.194)	(0.215)	(0.966)	(1.388)	(1.400)
Year & industry	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	996	498	498	996	498	498
\mathbb{R}^2	0.406	0.414	0.402	0.344	0.327	0.365
F-test	21.83	14.29	11.39	19.83	12.35	12.40
Prob > F	0.000	0.000	0.000	0.000	0.000	0.000

5. Conclusion

Firms urge to have a detail plan and controls in place to support company operations and revenue management best practices that may have an impact on operating performance (profitability and liquidity position) during the GST and SST periods [53]. Thus, the involvement of CEO with leading executive role of corporate governance in managing the operational and financial matters is prominent during the GST and SST periods for a favorable operating performance outcome. Accordingly, the objective of this study is to investigate the CEO role in managing the operating performance during the GST and SST periods.

The outcome reports that the CEO role is essential to manage the operating performance (profitability and liquidity) during the GST and SST periods. The findings show that younger CEO plays a critical role in bolstering the company's operating performance success. The CEO requires education not particularly in accounting or finance field and other criteria for example as mentioned in upper echelon theory for effective decision-making to enhance operating performance. The CEO ownership perceives to reduce the agency issues between the managers and principals. Interestingly, the outcome of this paper reveals that firms require a check and balance system when issuing shares ownership to CEO as to avoid any unfavorable outcome to operating performance (profitability and liquidity). For family CEO requires to balance their attention in profitability and liquidity position to achieve a promising operating performance during the GST and SST periods. The CEO role in managing and control business operations in order to achieve a positive operating performance is important for firm sustainable growth and to protect stakeholders' interest even during the GST and SST periods.

The theoretical implication of this paper elaborates that CEO age, CEO education, CEO ownership and CEO type meets the perception of upper echelon theory on values and cognitive base requirement to influence the decision-making and choice-making processes of the firms. For practical implication, the outcome is relevant to stakeholders, regulators and academics on the important of CEO role in achieving desirable operating performance during the GST and SST periods. The limitation of this paper only investigates the CEO role in operating performance during the GST and SST

periods. For future studies recommend to determine other characteristics of corporate governance for example the chairman or audit committee relationship with operating performance during the GST and SST periods.

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