

CORPORATE GOVERNANCE AND FIRM PERFORMANCE: EVIDENCE FROM AN EMERGING MARKET

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Abstract

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The paper investigates the link between corporate governance scores and firm performance among the largest 90 listed companies on the Saudi Stock market. The sample of 90 listed firms is split into two samples: firms with high governance scores and firms with low governance scores. The research compares and contrasts the operating performance of the two samples. In addition, regression models are used to test the link between governance scores and performance. No link between the companies' corporate governance scores and operating performance is found. It is difficult to capture all elements of the complex corporate governance topic in corporate governance scores. It seems that corporate governance in emerging markets lags far behind that of developed markets. This is the first paper to examine the link between corporate governance scores and operating performance in the Saudi market, a new emerging market that has not been examined. The paper adds to the debate in the literature whether there is a link between corporate governance scores and performance. The evidence in the literature is inconclusive.

Keywords: Corporate Governance, Governance Index, Emerging Market, Firm Performance

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1. INTRODUCTION

Good corporate governance is considered to have a considerable impact on economic growth and companies' performance. It is argued in the literature that good governance reduces agency costs and conflicts that might arise between the owners of the company and management (Jensen & Meckling, 1976). Core et al. (1999) find that firms with weaker governance structures have greater agency problems and firms with greater agency problems perform worse. Claessens and Yourtoglou (2013) highlight the need for much research on corporate governance in emerging and developing markets.

Studies on corporate governance in emerging markets are scarce compared to developed economies (Arura & Bodhanwala, 2018). This is a

clear gap in the corporate governance literature. This paper aims to fill the gap by investigating the link between corporate governance and firm operating performance in Saudi Arabia, an emerging market. The main research question is as follows: Is there a link between corporate governance and firms operating performance? Exploiting a unique data set from the Saudi Stock market (Tadawul) for the Corporate Governance Index, the paper examines the relation between the index scores and firm performance.

Several papers show a positive relation between corporate governance and firm performance. For example, Bhagat and Bolton (2008) find that better corporate governance contributes to better operating performance. Arura and Bodhanwala (2018) examine the relation between the Corporate Governance Index and firm performance among 407

Indian firms and find a positive relation. Gompers et al. (2003) find among 1500 large firms that companies with stronger shareholder rights (a measure for strong corporate governance) enjoy higher stock abnormal returns, higher profits and sales growth. Core et al. (2006) also find strong evidence that good governance leads to a much better operating performance; however, they did not find any evidence to support a positive relation between good governance and higher stock returns.

In contrast, several papers fail to find an association between good governance and better performance. Chidambaran et al. (2006) examine the effect of the change in the corporate governance link to the operating performance and stock returns and using three different samples, conclude that there is no effect. They state that "there is no significant difference in subsequent firm performance between firms with good and firms with bad governance". Lehn et al. (2005) find that there is no relation between the G-Index (governance index) and valuation multiples. Therefore, the results of the relation between governance and firm performance are inconclusive.

The contributions of this paper are twofold. First, it adds to the literature by providing new evidence from a pure emerging market that has not been examined previously. To the best of the author knowledge, no study has investigated such an important issue thoroughly, except a few papers that attempt to examine several corporate governance attributes with firm performance¹. Second, this paper fills an urgent need for studies on corporate governance in emerging markets in general.

Saudi Arabia, in particular, is of great interest because it joined the FTSE Russel index for emerging markets in 2018. This increases the importance of the Saudi market for foreign investors. The roots of the Saudi Stock market (Tadawul) can be traced back to the 1930s, when the first Arab automobile was established in the Kingdom. Since then, the market has undergone numerous changes. Currently, Tadawul has 175 listed companies distributed among 19 sectors. Tadawul is the largest market in the Middle-East and North Africa (MENA) region with total assets of almost SAR 4 trillion (US\$ 1.06 trillion). The government of Saudi Arabia has announced its 2030 vision with the aim of developing the stock market to be ranked among the top 20 stock markets around the globe. Saudi Arabia has been a G20 member since the 2007 global financial crisis.

This paper splits the sample of the 90 largest listed companies on the Corporate Governance Index into two samples: 45 firms with high governance score and 45 firms with low governance score. The study measures the firm performance using two measures of ROA and ROS. Moreover, the paper compares the performance of the 20 best firms in governance with the 20 worst firms. After that, regression models are used to investigate the link between governance scores and firm performance.

The results indicate that there is no statistically significant link between firms' corporate governance score and firms' operating performance. The sample of 45 firms with high governance score performs the

same as the sample of 45 firms with low governance score. Further, the 20 best firms and the 20 worst firms ranked by the governance index are compared, and the same results of no performance variations are found. This result is in line with that of Chidambaran et al. (2006) who find no association between corporate governance and firm performance. The results also confirm Ertugrul and Hegde (2009) who find no link between the corporate governance ratings by rating agencies and firm performance.

The paper also investigates the relation by regressing governance on the operating performance as measured by the return on assets (ROA), the return on sales (ROS), and the change in the performance between 2005 and 2006, and between 2006 and 2007, and find that no significant relation exists. Even the correlation between the corporate governance score and the operating performance for the whole sample is very weak at 0.07. No link is observed between the score and the operating performance. In other words, firms perform independently of their corporate governance score.

Although, the results seem unusual, the interpretation is that corporate governance is in general in emerging markets lags far behind that in developed markets. It is too early to see a link. It will take a lot of time until corporate governance becomes a cultural understanding rather than meeting regulatory body regulations and standards. Most companies in Saudi Arabia follow the regulations to avoid being fined by the Capital Market Authority (CMA), rather than voluntarily for ethical behaviour and standards.

The rest of the paper is structured as follows: Section 2 reviews the relevant literature, data and methodology are explained in Section 3, Section 4 presents the empirical results and findings, and the paper concludes in Section 5.

2. LITERATURE REVIEW

Evidence on the relation between corporate governance and firm performance is inconsistent in developed and developing nations. In industrial economies, several papers find a positive impact of good governance on companies' performance (see among others Gompers et al., 2003; Bhagat & Bolton, 2008). For instance, Salim et al. (2016) in a study of the impact of corporate governance quality on the banking sector find a statistically significant positive impact. Quality governance contributes to higher banking efficiency over time from 1999 to 2013. Other scholars including Chidambaran et al. (2006); Ertugrul and Hegde (2009), find no relation between governance and performance.

In developing nations, the results of the relation are similarly debatable and inconclusive. For instance, in India Arura and Bodhanwala (2018) examine Indian markets and find a positive relation between governance and firms' performance. Also, in China, Sami et al. (2011) find a positive relation between governance and firm performance. The conflict in the findings is even found in the same country. Cheung et al. (2008) construct a Corporate Governance Index for the 100 largest Chinese listed firms and find that corporate governance has no relation to operating performance.

¹ See among others Fallatah et al. (2012); Basuony et al. (2014).

In the Middle-East, there are few studies on corporate governance and its impact on firm performance. Buallay et al. (2017) examine the relation between corporate governance and firm performance among 171 listed companies for the period between 2012 and 2014. The authors conclude that there is no relation between corporate governance and operating performance. In addition, the market value measure shows the same result of no relation between governance and performance. Only two attributes of corporate governance, ownership and board size, are linked to firm performance. However, the authors use only five attributes to represent the corporate governance scores. Specifically, they use ownership, ownership of largest 3 shareholders, board size, independency of the board; and posts of chairman and the CEO. It is questionable whether these attributes represent the real corporate governance degree. In other words, governance quality cannot be restricted to a few board attributes.

Another study on the Saudi market was conducted by Al-Sahafi et al. (2015). The authors investigate the impact of corporate governance on the banking sector. They find that most corporate governance attributes do not show statistically significant links with performance, except board size and board independence, which are positively related to performance. The study, however, suffers from the same problem as that of Buallay et al. (2017) by only focusing on some attributes of corporate governance and focusing on the banking sector. In contrast, Basuony et al. (2014) investigate the impact of corporate governance on the banking sector (50 banks) in 2011 for the whole Gulf Cooperative Council (GCC) region and Yemen. They find that some governance mechanisms have an impact on market value performance. Nevertheless, they argue that the relation between governance and performance itself has not yet been clearly established, especially in emerging markets.

Al-Matari et al. (2012) focus on the links between the characteristics of the board of directors and firm performance. They examine 146 listed Saudi firms in 2010. Their overall conclusion contradicts agency theory. In other words, they find that the board of directors and audit committee characteristics do not mitigate the agency costs. Furthermore, they find that the audit committee size has a statistically significant impact on firm performance, but in the opposite direction from expectations. All other variables of the board of directors show no significant link.

Al-Hussain and Johnson (2009) study the relation between the corporate governance structure and bank performance among Saudi listed banks. They find a strong positive relation between the corporate governance structure and firm performance as measured by the ROA. However, surprisingly some attributes of block-holders, such as government ownership and domestic investors group, do not seem to have an association with banks performance.

Abbad et al. (2016) in a study on corporate governance and earnings management on the Amman stock exchange find that the level of governance is negatively associated with earnings management. In other words, better governance

leads to better management control and reduced agency costs. In addition, Aktan et al. (2018) find a positive impact of good governance on firm operating performance in Bahrain as measured by the ROA.

To sum up this section, findings regarding the relation between corporate governance and firm performance are mixed all over the world. The impact of quality governance on firm performance is unclear and needs much research and new methodologies.

3. DATA AND METHODOLOGY

3.1. Data sources and the governance index

The study measures the relation between the Corporate Governance Index score and firms' operating performance for the 90 largest Saudi listed firms on the Tadawul stock market. The research uses the index developed by the Corporate Governance Centre² for the 90 largest Saudi listed firms for the fiscal year of 2015 to examine the relation between CG ranking and firm performance. Table 1 shows the full index with the companies' scores and rankings. The index was developed by using four major corporate governance categories: the board of directors; the shareholders' rights and general assembly; public disclosure and transparency; and stakeholders' rights. Each category consists of several questions that measure directly the companies' adherence to the Capital Market Authority, the CMA's rules and standards. The company receives 1 point if it complies with the rules and zero otherwise. For some questions, the companies were given half a point (0.5), if the company partially complies with the standard. A total of 117 questions were used across the four corporate governance categories. Then, the scores were aggregated to get the overall weighted average corporate governance score³.

Data for other variables of firm performance were gathered from the Tadawul. Tadawul publishes quarterly and annual reports for all listed companies that include the companies' balance sheet, income statements, cash flow statements and board of directors' reports. All necessary data were collected manually.

Table 2 reports descriptive statistics for the Corporate Governance Index. The mean value for the index was 70 out of a 100, which shows reasonable adherence to the regulatory principles. In general, the companies are doing well in terms of the board of directors and shareholders rights. In contrast, firms are very poor when it comes to voluntary standards for stakeholders' rights. This result was expected in emerging markets where there is a lack of understanding of the importance of corporate governance. It will take a long time before companies realize that corporate governance is essential for achieving long-term sustainability and good performance, rather than avoiding fines by the regulatory body.

² The index was developed by the Corporate Governance Centre at Alfaisal University, Riyadh.

³ For the sake of space, details were avoided of how the index was developed, however more information can be provided by the author upon request.

Table 1. The Corporate Governance Index for the 90 largest Saudi listed companies for the fiscal year of 2015

CGI score%	CGI rank	CGI score%	CGI rank	CGI score%	CGI rank
91.9	1	71.9	32	66	63
90	2	71.6	33	65.7	64
88.3	3	71.3	34	65.5	65
88.2	4	71.3	35	65.5	66
86.9	5	71	36	65.3	67
81.4	6	71	37	65.3	68
80.8	7	70.7	38	65	69
80.6	8	70.3	39	64.9	70
80.3	9	69.4	40	64.8	71
80.3	10	69.2	41	64.7	72
80.2	11	69.2	42	64.6	73
79.9	12	69.1	43	64.5	74
79.8	13	69.1	44	64.4	75
79.7	14	69	45	64.3	76
79.2	15	68.9	46	64.2	77
78.8	16	68.8	47	63.8	78
78.6	17	68.3	48	63.7	79
78.4	18	67.9	49	63.6	80
78.4	19	67.7	50	62.9	81
78.4	20	67.7	51	61.9	82
78.3	21	67.5	52	61.4	83
77.4	22	67.3	53	61.3	84
76.2	23	67.2	54	60.7	85
75.6	24	67.2	55	60.4	86
75.1	25	67	56	59.8	87
74.7	26	66.9	57	59.3	88
74.5	27	66.9	58	59	89
74.3	28	66.9	59	58.1	90
72.6	31	66.1	62		

Note: This table illustrates the ranking for all 90 companies from best to worst.

Table 2. Statistics for the Corporate Governance Index

	Cumulative CG score	BOD score	Shareholders score	Public dis. and tran. score	Stakeholders score
N	90	90	90	90	90
Mean	70	82	81	59	32
Median	69	81	83	58	31
Std. Deviation	8	7	11	13	17
Range	46	33	70	60	81
Minimum	46	63	28	30	8
Maximum	92	97	98	89	88
Percentiles	10	61	75	43	12
	20	64	78	47	15
	30	65	78	53	23
	40	67	79	54	23
	50	69	81	58	31
	60	71	83	61	35
	70	74	84	67	38
	80	78	87	70	46
90	80	93	92	75	54

Note: The index ranks the largest 90 Saudi listed firms based on their adherence to the CMA standards. Cumulative CG score is the overall corporate governance score, BOD score is the scoring for the board of directors' category and other columns report the individual score for each of the other categories.

3.2. Methods and measurements

The sample of 90 listed firms is divided into two groups, each includes 45 companies. The 45 highest-ranked firms represent companies with good corporate governance scores, while the 45 lowest-ranked firms represent firms with poor corporate governance scores. A median score of 69 is used to split the sample evenly. In addition, the sample is split into two smaller groups of 20 firms each to compare 20 best companies and 20 worst companies.

The paper compares the operating performance over a three-year period, the year of the index 2015 and the subsequent years of 2016 and 2017. The ROA and the ROS are used as the measures for

operating performance. Bhagat and Bolton (2008) and Core et al. (2006) use the ROA as the measure for operating performance. The paper also compares changes in firm performance between years: from 2015 to 2016 and from 2016 to 2017. This is to capture any performance improvement or decline.

The ROA and ROS can be calculated as follows:

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}} \quad (1)$$

$$ROS = \frac{\text{Net Income}}{\text{Revenues}} \quad (2)$$

Then, statistically, significant differences are measured using the *t*-test for mean difference.

Furthermore, to test for the relation between operating performance and corporate governance, the following model is proposed:

$$ROA = \beta_0 + \beta_1 CGS + \beta_2 BS + \beta_3 Gov \quad (3)$$

where CGS is the corporate governance score the company received on the index. BS is the board size standardized by the maximum size regulated by the Capital Market Authority (CMA). The Gov explanatory variable represents government ownership of the firm as a percentage. This is to capture any effect of ownership on the performance. Al-Janadi et al. (2016) find a negative impact of government ownership on corporate governance quality and disclosure. Therefore, government ownership included in the model to capture this effect.

The ROA dependent variable can be replaced by the ROS and the change in the ROA and ROS using the same model. Uni- and multi-variate regression models are used to examine the relation between the operating performance and corporate governance.

The Corporate Governance Index components scores are used instead of the overall score to capture the association between the index sub-category and firm performance. Specifically, the governance index score variable is replaced by four sub-category scores: the board of directors' score; the shareholders' rights score; the public disclosure and transparency score; and finally the stakeholders' score. Ertugrul and Hegde (2009) explain the difficulties faced by researchers to establish a single score that captures all the complex elements of Corporate Governance Index. Therefore, focusing on other characteristics of corporate governance is more effective.

4. RESULTS

4.1. Performance comparison

Table 3 Panel A, shows the operating performance for the 45 best firms, while Panel B shows the results for the 45 worst firms. As can be seen clearly, firms with good governance perform better than firms with poor governance. For instance, for 2015, the best firms achieved a 7.3% ROA, while the worst firms achieved a 6.8% ROA. In all other years, the measures show better results for the higher-ranked firms, except the ROS for 2015 when lower-ranked firms have better performances than higher-ranked firms. However, no results are statistically significant. Lower-rank firms are not different from higher-ranked companies.

For the change in the performance from 2015 to 2016 and from 2016 to 2017, the results give an advantage to the high-ranked firms over the low-ranked firms. For instance, the change in the ROA from 2015 to 2016 was -1.34% for good governed companies, while the change was -2.74% for poorly governed ones. Well governed firms outperform poorly governed firms, but the results are insignificant. All other change measures show the same outcome as those well governed companies are

better than poorly governed companies, but no difference is found to be significant. Both groups are showing negative results and a performance decline. This can be explained by the tough years the Saudi economy went through in 2016 and 2017 with a declining oil price, reducing government spending, imposing of taxation, and tightening budgets.

The result is contrary to the vast majority of studies in the literature that find that better governance is associated with better performance. Even in emerging markets, the present results contradict the previous consensus. Javid and Saboor (2015) in a study on corporate governance and firm performance of 58 Pakistani firms find a strong positive relation between corporate governance and firm performance. Dwivedi and Jain (2005) find that better operating performance is positively associated with some corporate governance characteristics, but not with all variables. For instance, they find only weak evidence for a relation between board size and firm performance. Berthelot et al. (2010), in a study of more than 200 Canadian firms, find a strong relation between corporate governance ratings and firm performance.

The results are in line with Chidambaran et al. (2006) who find that governance does not cause performance. This is also consistent with the literature that investigated the causal relation between Gompers' et al. (2003) G-Index and firm performance. Core et al. (2005) find that the market is not surprised by the negative performance of poorly governed firms. Lehn et al. (2005) find that there is no relation between the Corporate Governance Index and firm valuation. Bowen et al. (2006) actually find a positive relation between poor governance and better firm performance.

The result is also consistent with studies that focus on the impact of some governance characteristics on firm performance. For instance, Filtotchev et al. (2005) in a study of the ownership impact on firm performance among 228 Taiwanese companies conclude that family control does not contribute to better performance. Nevertheless, they find a link between foreign investment and institutional investors and better firm performance.

Ertugrul and Hegde (2009) using the corporate governance ratings provided by three major American agencies find that the ratings are poor predictors for companies' future performance. They find no link between corporate governance score and firm performance. They state "The results reflect the recent observations by academic researchers and money managers that it is extremely difficult to distil all of the complex governance mechanisms into a single integrated, yet informative overall score". Taking this argument into consideration, perhaps the index itself developed by the corporate governance centre does not necessarily reflect the real corporate governance performance.

The correlation between the corporate governance score and the operating performance measured by the ROA is very weak at 0.07. This confirms the findings of no linear relation between corporate governance and operating performance. To further investigate the sample and to avoid outliers, the paper restricts the analysis next to the

20 top firms in the index against the 20 worst companies.

As can be seen from Table 4, Panel A and Panel B, the ROA shows that 20 worst firms in corporate governance surprisingly have better ROA than 20 best companies. In 2015, the worst companies have a 7.66% ROA, while, the best firms have a 7.30% ROA. However, the difference is insignificant. The ROS shows the same pattern of mixed results in

which the two samples outperform each other year to year without a solid conclusion. The change in the performance from year to year gives an advantage to the best firms over the worst firms, however, none of the results are statistically significant. This is consistent with Ertugrul and Hegde (2009) who find that corporate governance ratings are a poor predictor for firm performance.

Table 3. The results for the whole sample of 90 listed firms on the Saudi Stock market

Panel A. Higher ranked sample: The operating performance for 45 companies with good corporate governance

	ROA 0	ROA 1	ROA 2	ROS 0	ROS 1	ROS 2	ROA 0-1	ROA 1-2	ROS 0-1	ROS 1-2
Mean	7.28%	5.93%	5.47%	21.65%	21.01%	19.21%	-1.34%	-0.46%	-0.64%	-1.79%
Median	5.72%	4.26%	4.28%	13.46%	14.15%	15.24%	-0.79%	0.09%	-1.26%	0.66%
75th	9.58%	8.32%	6.68%	35.42%	34.15%	31.83%	0.15%	0.98%	2.20%	3.51%
25th	1.69%	1.35%	1.83%	5.52%	4.22%	4.30%	-2.53%	-1.53%	-7.29%	-3.98%

Panel B. Lower ranked sample: The operating performance for 45 companies with poor corporate governance

	ROA 0	ROA 1	ROA 2	ROS 0	ROS 1	ROS 2	ROA 0-1	ROA 1-2	ROS 0-1	ROS 1-2
Mean	6.78%	4.03%	2.93%	23.28%	13.31%	10.78%	-2.74%	-1.11%	-9.97%	-2.53%
Median	5.39%	3.73%	2.27%	18.42%	15.20%	11.90%	-1.19%	-1.13%	-3.36%	-1.52%
75th	10.86%	9.20%	6.65%	43.83%	26.92%	27.21%	-0.10%	0.74%	-0.14%	4.58%
25th	2.08%	1.23%	1.26%	10.01%	5.56%	2.26%	-3.47%	-4.50%	-9.44%	-12.27%

Table 4. The results for the best and worst 20 firms listed on the Saudi Stock market

Panel A. The operating performance for 20 best governed firms

	ROA 0	ROA 1	ROA 2	ROS 0	ROS 1	ROS 2	ROA 0-1	ROA 1-2	ROS 0-1	ROS 1-2
Mean	7.30%	5.63%	6.02%	23.18%	20.29%	21.05%	-1.67%	0.39%	-2.89%	0.76%
Median	3.02%	2.25%	3.26%	11.26%	13.10%	13.44%	-0.63%	0.19%	-1.10%	1.39%
75 th	9.60%	7.44%	6.72%	40.37%	40.27%	32.71%	0.10%	2.19%	1.39%	4.05%
25 th	1.23%	0.42%	1.84%	4.52%	3.57%	5.51%	-2.80%	-1.31%	-6.56%	-1.68%

Panel B. The operating performance for 20 worst governed firms

	ROA 0	ROA 1	ROA 2	ROS 0	ROS 1	ROS 2	ROA 0-1	ROA 1-2	ROS 0-1	ROS 1-2
Mean	7.66%	5.94%	2.87%	27.12%	20.28%	6.78%	-1.73%	-3.06%	-6.84%	-13.49%
Median	7.63%	4.37%	2.44%	23.52%	20.46%	11.35%	-1.41%	-2.68%	-2.74%	-7.11%
75th	11.16%	9.22%	7.48%	48.65%	32.56%	34.93%	0.38%	-0.03%	0.14%	-0.68%
25th	4.42%	1.68%	-0.80%	12.67%	6.42%	-1.90%	-3.01%	-5.19%	-9.45%	-17.99%

4.2. Multivariate analysis of operating performance and corporate governance

Table 5 reports the results for the univariate and multivariate regression models. Several governance explanatory variables were regressed on the operating performance as measured by the ROA, ROS and the change in the operating performance. The corporate governance score of the corporation has no relation to the operating performance, which confirms previous findings. Well governed companies do not perform better than poorly governed firms.

Other explanatory variables of governance characteristics also do not explain the performance variation. The board size does not show a significant relation to firm performance. Contrary to the consensus in the literature that board size contributes to better firm performance, the sign of the relation here is negative indicating the opposite.

In addition, the government ownership in the corporation does not show explanatory power for the firm performance. The fit of all models is very weak as can be seen from the adjusted R-square values. The results are unexpected.

These results confirm the previous results that there is no association between corporate governance scores and firm performance. This is in line with Ertugrul and Hegde (2009) who find no link between companies' corporate governance ratings and firm performance. Different from those authors, however (results are not reported for the sake of space), there is no link between the Corporate Governance Index components and the operating performance. Even when the corporate governance components of the board of directors' scores or the shareholders' rights scores were regressed over the firm performance, there is no statistically significant link.

Table 5. Ordinary least square estimates

Dependent Variable		ROA 2015	ROA 2016	ROS2015	ROS2016	Change ROA
Independent	Univariate	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept		0.0696	0.009	0.1351	0.2476	0.079
CGI score	0.00077	0.0009	0.00084	-0.0016	0.00087	-0.00013
BS	-0.0759	-0.0867	-0.0056	0.2263	0.4067	0.0811
Gov	0.0234	0.0168	0.0297	0.1669	0.1726	0.0129
<i>f</i> -Stat		0.7489	0.3596	0.9191	1.3591	0.9497
Adj-R2		0.008	0.0217	0.0026	0.012	0.0017

Note: The dependent variable is the operating performance of 90 Saudi listed corporations measured by the ROA, ROS and the change in the ROA. The first column reports the univariate results. Independent variables include the CGI score of the corporations, BS is the board size standardized by the maximum number of members allowed to sit on the board, Gov represents the government ownership percentage in the corporation.

5. CONCLUSION

This paper investigated the relation between the Corporate Governance Index score and the operating performance among the 90 largest listed Saudi corporations. The sample was divided into two samples: the best performers with the highest scores on the Corporate Governance Index and the worst performers with lowest scores. The results indicate that there is neither a statistical nor economic difference in the operating performance as measured by the ROA, the ROS and the change in performance.

Moreover, the paper compared the 20 best firms and the 20 worst firms, and the results showed the same conclusion of no operating performance difference between good governed firms and poorly governed ones. Several explanatory variables were regressed on the operating performance. The corporate governance scores did not explain any of the performance variations. Several methods of regressing corporate governance scores were used including taking the governance scores as a percentage and using a dummy variable between good and poor governed firms to allow for the non-linearity relation. No significant relation between governance and performance was observed.

Other governance characteristics such as the board size and government ownership also did not explain the firm performance. In addition, the Corporate Governance Index components, such as the board of directors and the shareholders' rights, were regressed on the operating performance and no association was observed.

The overall conclusion is that corporate governance in emerging markets lags far behind that in developed economies. This is evident in the literature where little research has been conducted. It will be a long time until corporate governance becomes a cultural awareness.

The present paper has several limitations. First, the study period is short. The operating performance was measured over three years 2015-2017. Second, the sample size is small, only the 90 largest firms. Third, the paper does not tackle the issue of market performance measures. Nevertheless, the paper can be used as a foundation for a much deeper analysis. Future research should look at longer time frames and larger samples. Focusing on corporate governance standards (the attributes) as explanatory variables instead of the index or its components as a whole is a must. More indexes and ideas for constructing indexes for measuring the governance quality are needed.

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