CORPORATE GOVERNANCE AND FIRMS STOCK RETURNS IN THE EMERGING MARKET

Ahmed S. Alanazi *, Saad A. Alhoqail **

* *Corresponding author*, College of Business, Alfaisal University, Saudi Arabia
Contact details: College of Business, Alfaisal University, P.O. Box 50927, Riyadh, 11533, Saudi Arabia
** College of Business, Alfaisal University, Saudi Arabia

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Abstract

This paper examines the relationship between corporate governance and firms' performance (stock returns) in the emerging market. The paper fills the need for empirical evidence on governance issues in the scarce emerging markets compared to the developed world. Exploiting a unique dataset on the corporate governance index for the largest 90 companies listed on the Saudi stock market, we construct two portfolios. We compare the performance of good governed companies and poorly governed firms. We find that good governed portfolio outperforms the poor one. Nevertheless, regression results do not show any association between corporate governance score and performance. We interpret this as weak evidence for the link between corporate governance and firms' performance.

Keywords: Corporate Governance, Corporate Governance Index, Stock Returns, Emerging Market

Authors' individual contribution: Conceptualization – A.A. and S.A; Methodology – A.A. and S.A; Writing – A.A and S.A; Investigation – A.A and S.A; Funding – S.A; Resources – A.A.

1. INTRODUCTION

Corporate governance topic dominates the management literature for the past fifteen years and it is growing continuously. Corporate governance is the set of mechanisms that control the behaviour of managers and limit their ability to expropriate shareholders (Cornelius, 2005; Fahy et al., 2004; Ravenscraft, 1996). A recent trend in the corporate governance literature is examining the impact and the association between corporate governance and firms' performance and the nature of the relationship, the causality and the endogeneity problems (Bhagat & Bolton, 2008). Sharma, Naiker, and Lee (2009) argue that the literature reveals a link between corporate governance and firm performance, but empirical research of this has not yet reached conclusive results.

There is a massive body of literature examines the relationship between corporate governance and firms performance. Gompers, Ishii and Metrick (2003) examine the association between corporate governance and stock returns and find that corporations with better shareholders rights outperform firms with weak shareholders rights by 8.5% in the 90s. Bebchuk, Cohen, and Ferrell (2009) re-examine the relationship by adding more shareholders provision and conclude the same results that better shareholders rights contribute to better performance. Kouwenberg, Salomons and Thontirawong (2013) argue that firms with poor governance should have a higher risk and consequently higher returns. They find that firms in Asia which are poorly governed have higher beta, higher expected returns and higher realized returns compared to good governed firms.

Nevertheless, the relationship is far from consensus. Bhagat and Bolton (2008) use the same measures of corporate governance and conclude that there is no relationship between corporate governance measures and stock returns, which is contrary to Gompers et al. (2003). They state that the nature of the relationship depends on whether one would account for the endogeneity between governance and stock returns.

The main objective of this paper is to examine the relationship between corporate governance and stock returns in the emerging market. We use the Corporate Governance Index, the CGI developed for the largest 90 Saudi listed firms to examine whether governance level is associated with better firms performance. Our study differs from previous papers in that it uses an index that includes all dimensions of corporate governance: the board of directors; the shareholders' rights; public disclosure and transparency; and stakeholders' rights.

Furthermore, in this paper, we develop a new methodology of testing the relationship between corporate governance performance and stock returns by constructing two portfolios, one for the firms with good corporate governance score and the other one for firms with bad scores. Although Gompers et al. (2003) divide their sample into democracy and dictatorship portfolios, our portfolios are different in that they took the overall corporate governance score using all governance dimensions. Gompers et al. (2003) use only provisions on shareholders rights. We argue that shareholders rights cannot provide a reliable scoring for the much bigger issue of corporate governance. Actually, the board of directors' dimension of corporate governance is more important since they are the safeguards of corporations who manage the day to day operation. In most corporate governance indices, the board of directors is given the heaviest weight (Adams, Hermalin, & Weisbach, 2010; Keasey & Wright, 1993; Bainbridge, 2003) on the roles of the board of directors.

The third contribution of this paper, it is the first paper to examine the link between corporate governance and performance in the MENA region (Middle-East and Northern Africa). Studies on corporate governance issue in emerging markets are scarce compared to advanced economies despite the existence of the corporate governance framework in most of these economies (Arora & Bodhanwala, 2018).

Investigating the performance of the two portfolios, the well-governed firms and the poorly governed one, we find that, good portfolio has outperformed the portfolio of poorly governed firms. We use the Cumulative Abnormal Returns (CARs) and the Buy-and-Hold returns and they both show that the good portfolio has outperformed the bad portfolio. A good portfolio has achieved 1.11% over two-year, while the bad one got a negative return of -0.33%. After that, we pooled the market adjusted-returns for all 90 companies over two-year to test for the association between returns and corporate governance scores and several control variables. We find that there is no statistically significant relationship between performance and corporate governance scores. This is consistent with Ertugrul and Hegde (2009) who find no relationship between governance ratings and firms' performance. Also, the finding is consistent with Alanazi (2018) on that there is no relationship between governance ratings and firms operating performance. It seems that the complex corporate governance topic cannot be summarized into a single one score that can capture all elements.

The rest of the paper is structured as follows: Section 2 reviews the relevant literature. Section 3 provides information on data sources, index and the methodology, Section 4 provides the results and we conclude in Section 5.

2. LITERATURE REVIEW

Corporate governance is a very complicated topic, and it is usually divided into many categories. Broadly speaking, it can be divided into four dimensions: the board of directors, shareholders' rights and general assembly, public disclosure and transparency; and stakeholders' rights (Gompers, Ishii, & Mettick, 2003; Bebchuk, Cohen, & Ferrell; 2009).

The gap in corporate governance topic is clear between developing and developed markets. It is even more evident in the MENA region. For example, Claessens and Yourtoglu (2013) argue that research on corporate governance in emerging and developing markets is a need rather than a choice. Dupuis, Spraggon, and Bodolica (2017) state that little is known about the effectiveness of various governance mechanisms in family-owned enterprises operating in emerging markets, which is a major characteristic among the Saudi market. Only a few studies have tackled some issues of the impact of corporate governance on firm performance.

The evidence on the impact of good governance on firms' performance is documented by many authors. For example, Bhagat and Bolton (2008) associate better governance with better operating performance. In addition, Arura and Bodhanwala (2018) investigate the link between governance index and firms performance among 407 Indian firms and document a positive relationship. Gompers, Ishii and Metrick (2003) find among 1500 large firms that companies with stronger shareholder rights (a measure of good corporate governance) show higher stock abnormal returns, higher profits and sales growth. Moreover, Core, Guay, and Rusticus (2006) find evidence that good governance leads to a significantly better operating performance.

Nevertheless, not all papers succeed in finding a positive link. For instance, Chidambaran, Palia, and Zheng (2006) examine the effect of the change in the corporate governance link to the operating performance and stock returns and conclude that there is no effect using three different samples. They state that "there is no significant difference in subsequent firm performance between firms with good and firms with bad governance. Lehn, Patro, and Zhao (2005) find that there is no relationship between the G-Index and valuation multiples. Therefore, the results of the relationship between governance and firms' performance are inconclusive.

Buallay, Hamdan, and Zureigat (2017) investigate the relation between governance and firm performance for 171 listed firms on the Saudi market. They conclude that there is no link between governance and performance. Nevertheless, some board characteristics (the board size and government ownership) show a significant link to performance. In addition, Al-Sahafi, Rodrigs, and Barnes (2015) focusing only on the banking sector of Saudi Arabia find no relation between governance and firm performance. Only the board size and the number of independent members on the board show a positive significant impact. Furthermore, Basuony, Mohamed, and Al-Baidhani (2014) investigate a much larger sample size of 50 banks in the Gulf Cooperation Council (the GCC) region including Saudi Arabia find that the relationship between governance mechanisms and firm performance is not clear.

In other emerging markets, Hassan, Karbhari, Isa, and Razak (2017) investigate the effect of the board characteristics of 32 Malaysian firms between 2008 and 2013. The board characteristics the researchers examine include board size, board structure, board independence, board competence, board meetings, and directors' ownership. Among these characteristics, board structure, board competence, and board independence show a positive relation to performance.

Also, a very similar board structure to the Saudi market where most firms are controlled by

either the government or families, Seifzadeh (2015) examines the relation between the CEO and the independent members of the board. The author finds that resistance to the existence of independent members by founder CEOs is stronger than that by non-founder CEOs.

To sum up, the gap in corporate governance topic in the emerging market is evident. Also, the evidence on the impact of the governance on the firms' performance is inconclusive and requires much more analysis.

3. DATA AND METHODOLOGY

3.1. Data sources

Data for the Corporate Governance Index, the CGI were gathered from the scoring cards used in evaluating the companies' adherence to the Capital Market Authority, the CMA of Saudi Arabia[1].

The index ranks the companies according to their level of compliance during the fiscal year of 2015. The index was developed in 2016 but examining the compliance for the previous year of 2015. Studies on corporate governance indices include the Corporate Governance Index developed by Khanna et al. (2001), and by Klapper and Love (2002), the index developed by Black, Jang, and Kim (2003a and 2003b), the Gompers, Ishii, and Metrick (2003) Index.

The index of this study uses 117 variables divided among four corporate governance categories: The board of directors; the shareholders' rights; public disclosure and transparency; and stakeholders' rights. The index ranks the 90 companies based on their adherence to the 117 questions.

Each category is evaluated over 100 points. The final corporate governance score is the weighted average of the four categories over 100 points. The corporate governance score reveals the compliance of companies to good corporate governance principles, which are determined by the Capital Market Authority, the CMA and OECD. The four categories and their weight on the final CG score are as follows[2]:

- Board of Directors and Executive Management (35%);
- Shareholders' Rights and General Assembly (25%);
- Public Disclosure and Transparency (30%);
- Stakeholders (10%).

The corporate board of directors is a body entrusted with the power to make economic decisions affecting the well-being of investors' capital, employees' security, communities' economic health, and executives' power (Molz, 1985). The board of director's sub-category is given the heaviest weight because the board becomes the center of attention if anything goes wrong. They are the safeguards for corporations and manage the day to day operations (Adams, Hermalin, & Weisbach, 2010). See also Keasey and Wright (1993) and Bainbridge (2003) on the roles of board of directors.

Each category contains the items used and the corresponding number of questions used to evaluate the firms' compliance with those items. After evaluating the companies based on publicly available data, we contacted the company for double-checking and to give the company the opportunity to provide any missing information. The questions used to evaluate the performance remain confidential as is the case with the companies ranking identity. This is to avoid any conflict with the companies.

Table 1 shows the full index with the companies' scores and ranking. As can be seen from Table 1, the highest score in the index was about 92 out of 100, while the lowest score was 58. This shows the huge variation among Saudi listed firms in complying with the CMA regulations. The mean score value was 70/100, which shows a reasonable level of compliance generally.

Data on the stock prices and returns were collected from the Saudi Stock Market, Tadawul[3]. Tadawul publishes the stock prices on a daily basis. We collect these data and use monthly closing price quotation for the purpose of this study. Closing price conventionally is taken in event studies assuming that it is the last settlement price for a given day.

Data on the Saudi Stock Market Index, Tadawul All Share Index (TASI) were gathered from Tadawul. Tadawul publishes the index value on a daily basis. We gather TASI closing values for the corresponding period with the companies.

Table 1. Corporate Governance Index, the CGI for 90 largest Saudi Listed Companies

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: the Corporate Governance Index for largest 90 Saudi listed companies for the fiscal year of 2015. This table illustrates the ranking for all 90 companies from best to worst. The identity of the company is hidden for confidentiality purposes.

3.2. Stock return measures

[1] The index was developed by the Corporate Governance Centre at Alfaisal University, Riyadh.

[2] The weight of sub-categories is determined based on their relative importance, number of criteria, empirical evidence, and international practices.

[3] Tadawul is the official name for the Saudi Stock Exchange Market. Tadawul is an Arabic word means exchange. Thus, the data on stock price changes have been taken from the source. There are other databases could be used such as Argaam and the gulf base, but Tadawul is more accurate because it is the main source.

The paper attempts to investigate the link between corporate governance scores and firms' performance measured by the stock returns. The firms' corporate governance scores are taken from the CGI, Index, which ranked the companies from the top with the best score to the bottom with the lowest score.

We construct two portfolios for the whole sample of 90 listed firms. The first portfolio is the good firms in the corporate governance index, while the second one is the bad firms. Gompers, Ishii and Metrick (2003) divide their sample into two portfolios (Democracy and dictatorship portfolios) according to their score on the shareholders' rights. Our portfolios are different in that they are based on the overall corporate governance score, rather than just shareholders rights.

The good portfolio consists of 45 firms, which represents companies with good corporate governance score. On the other hand, the bad portfolio is the other 45 firms with bad corporate governance scores. We use the median score of 69 to split the sample evenly. Bhagat and Bolton (2008) and Core, Guay, and Rusticus (2006) all use stock returns as the measure of performance. We follow Ritter (1991) on measuring the performance of portfolios.

The firm raw return is conventionally calculated by taking the difference between the company closing price of the month and the closing price of the previous month for two years as follows:

$$r_{firm} = \frac{P_1 - P_0}{P_0} * 100 \quad (1)$$

Where P_1 is the closing price of the company for the event month and P_0 is the closing price of the previous month.

The market adjusted-return is calculated as the difference between the initial raw returns of the company and the return on the corresponding index (TASI) for the corresponding period.

$$ar_{firm} = r_{firm} - r_{index} \quad (2)$$

Therefore, the average adjusted returns on a portfolio of n stocks for event month t is the equally-weighted arithmetic average of the adjusted-returns:

$$AR_t = \frac{1}{n} \sum_{firm=1}^{n} ar_{firm,t} \quad (3)$$

The cumulative adjusted performance from event month q to event month s is the summation of the average adjusted-returns:

$$CAR_{q,s} = \frac{1}{n} \sum_{t=q}^{s} AR_t \quad (4)$$

There is no consensus on which measure is best for returns performance. As Barber and Lyon (1997) state cumulative abnormal returns are biased predictors of buy-and-hold returns. Therefore, as an alternative to the use of CAR, we also use 1- and 2-year holding period returns, defined as

$$R_i = \prod_{t=1}^{24} [1 + r_{it}] \quad (5)$$

To further investigate the association between the corporate governance score and the firms' stock returns. We propose the following regression model:

$$Performance\ (Returns) = \beta_0 + \beta_1\ CGS + \beta_2\ Ownership + \beta_3\ Board\ size + \beta_4\ size + \varepsilon \quad (6)$$

In this model, the dependent variable is the companies' average adjusted-returns. Bhagat and Bolton (2008) use stock returns as their measure of companies' performance.

The independent variables are the Corporate Governance Score (CGS) on the index on a scale of 100. This can be replaced by dummy variables where good portfolio will take on values of 1 and bad portfolio will take 0. Corporate governance score would be the most important variable and the focus because this is what we are trying to discover. Other independent variables are used as control variables.

Demsetz (1983) suggests a relation between companies size and governance and performance, thus we include it in the model. The size will be measured by the market capitalization of the companies (See Basu, 1977; Fama & French, 1993) on the impact of size on returns). In addition, firms with larger ownership and block-holders are more likely to perform better than firms with scattered ownership (Smith & Watts, 1992; Gillan, Hartzell, & Staks, 2003; Demsetz & Lehn; 1985). Therefore, we incorporate ownership to capture any effect. Board size is one major characteristic of corporate governance would have an impact on corporate governance and consequently on performance, thus we include it (Yermack, 1996). Board size is standardized by the maximum number of 12 members according to the CMA standards.

4. RESULTS

4.1. Portfolios stock returns

Table 2 reports the raw returns, the adjusted-returns and the cumulative abnormal returns for both portfolios, the good and bad one. As can be seen, the raw average returns over two-year for the good portfolio is -0.57%, while the average for the bad portfolio is -0.64%. They are both negative because the study period coincides with a difficult time in Saudi Arabia of plunged oil prices and tightened budget. Both portfolios have enjoyed 10 months of positive returns during the two-year period with 20% being the maximum return.

Moving to the adjusted-returns for both portfolios, we observe that the good portfolio has outperformed the bad portfolio and the whole Saudi market (Tadawul). A good portfolio has an average adjusted-return over two-year of 0.05%, while the bad portfolio achieved -0.01%. Almost half the period of 12 months, both portfolios outperform the Saudi market. This is mainly because the sample consists of the largest and best 90 companies listed on Tadawul.

Moving to the cumulative returns, we find that the good portfolio has outperformed the bad portfolio in 15 months during the two-year period. Well-governed companies achieved positive cumulative adjusted-returns on 19 months versus 17 months for the poorly governed companies. The standard deviation for the good portfolio is 11%,

while it is 12% for the bad portfolio, which shows greater volatility and higher risk for the poorly governed firms. This is consistent with Kouwenberg, Salomons, and Thontirawong (2013) on the risk of poorly governed corporations.

Figure 1 shows the cumulative abnormal returns for both portfolios. It can be clearly seen that the good portfolio for well-governed firms has outperformed the badly governed firms. One noteworthy observation is the variability of the returns for the bad portfolio, which is much bigger. This can be explained by the higher risk associated with poorly governed firms.

Table 3 reports the results for the buy-and-hold returns where both portfolios are held from the first month of 2015 until either one-year or two-year periods. The good portfolio has outperformed the bad one over one-year and two-year. All statistic measures are showing that good portfolio has outperformed the bad portfolio. However, both portfolios are showing negative returns. This can be interpreted by the time period of 2015 and 2016 where oil prices declined and the Saudi government tightened their spending budget to reduce deficit, which in turn affected the whole economy including the stock market. Looking first at the average, we see that the good portfolio has an average of -0.18% and -13.09% over one-year and two-year respectively. The poorly governed portfolio has larger negative returns of -1.42% and -14.3% respectively. The maximum of buy-and-hold returns over two-year was 14.53%, while it is 14.23% for the bad portfolio. All statistics give favour to the good portfolio over the bad one.

Table 2. Comparison between the good portfolio and the bad portfolio returns

Month	*Raw good*	*Raw bad*	*Adjusted good*	*Adjusted bad*	*CAR good*	*CAR bad*
1	10.42%	9.91%	5.52%	5.01%	5.52%	5.01%
2	-0.61%	2.91%	5.13%	8.65%	10.66%	13.65%
3	-5.20%	-7.44%	-17.23%	-19.46%	-6.57%	-5.81%
4	9.84%	9.14%	11.33%	10.62%	4.76%	4.81%
5	0.22%	-0.10%	6.43%	6.11%	11.18%	10.92%
6	-5.02%	-4.42%	-5.14%	-4.54%	6.04%	6.38%
7	-4.35%	-6.12%	12.97%	11.20%	19.01%	17.58%
8	-16.25%	-16.81%	-14.68%	-15.24%	4.33%	2.34%
9	-0.65%	0.28%	3.12%	4.05%	7.45%	6.39%
10	-2.96%	-5.37%	-4.57%	-6.99%	2.88%	-0.60%
11	6.43%	2.04%	10.97%	6.58%	13.85%	5.98%
12	-5.21%	-1.37%	8.03%	11.87%	21.88%	17.85%
13	-15.85%	-15.20%	-17.45%	-16.80%	4.43%	1.04%
14	1.96%	2.71%	-0.18%	0.56%	4.25%	1.61%
15	1.04%	-0.53%	-8.32%	-9.89%	-4.07%	-8.29%
16	8.42%	12.69%	13.67%	17.94%	9.60%	9.65%
17	-3.59%	-5.52%	-4.39%	-6.32%	5.21%	3.34%
18	0.59%	3.15%	3.64%	6.20%	8.84%	9.53%
19	-4.36%	-4.14%	-0.82%	-0.61%	8.02%	8.93%
20	-7.10%	-7.02%	0.40%	0.48%	8.42%	9.41%
21	-11.34%	-13.10%	-18.26%	-20.02%	-9.83%	-10.61%
22	8.28%	6.81%	-8.16%	-9.62%	-17.99%	-20.23%
23	22.10%	22.90%	19.09%	19.90%	1.11%	-0.33%
Average	*-0.57%*	*-0.64%*	*0.05%*	*-0.01%*		
Std			*10.67%*	*11.53%*		

Note: this table reports the raw, adjusted-returns and cumulative returns for both portfolios, the good and bad one. Each portfolio consists of 45 firms. The good one is the firms with high corporate governance score on the index, while the bad one is the one with a low score. Raw returns are calculated for each firm by taking the difference between the closing price of the month and the closing price of the previous month. Adjusted-returns are the raw returns adjusted with the general market index Tadawul All Share Index TASI. Cumulative returns are the average of the summation of the firm's adjusted-returns.

Figure 1. Cumulative abnormal returns comparison between good and bad portfolios

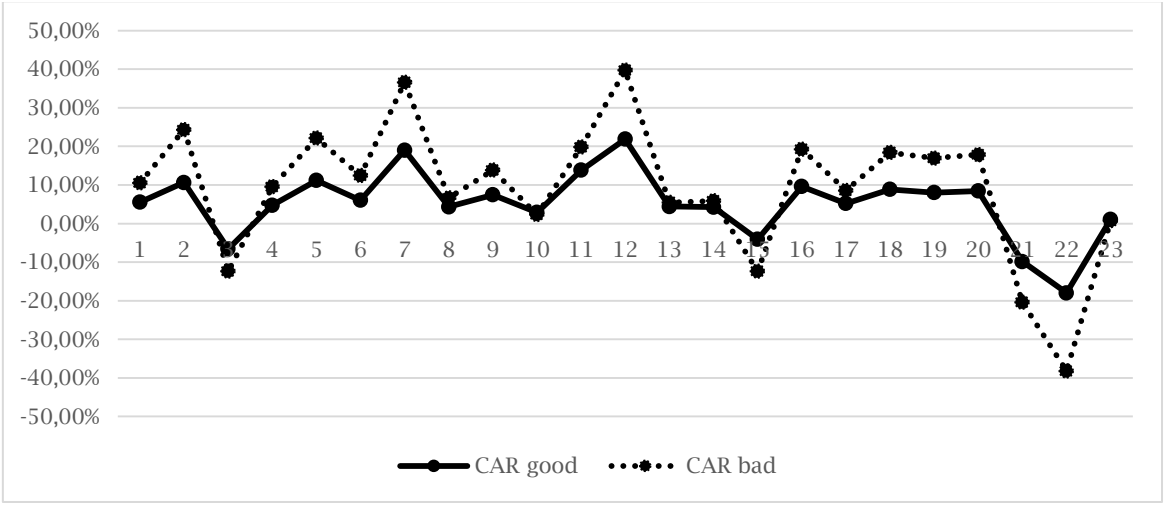

Table 3. Buy and hold returns comparison between the good and poor governed firms

Statistic	*Good portfolio*	*Bad portfolio*
average 1 year BH	-0.18%	-1.42%
average 2 year BH	-13.09%	-14.30%
25th percentile 1-year BH	-13.00%	-15.48%
25th percentile 2-year BH	-26.31%	-27.46%
75th percentile 1-year BH	9.92%	10.70%
75th percentile 2-year BH	4.05%	3.55%
max 1-year BH	14.53%	14.25%
max 2-year BH	14.53%	14.25%
min 1-year BH	-15.98%	-19.15%
min 2-year BH	-39.13%	-40.04%

Note: this table reports the buy-and-hold returns for both portfolios, the good portfolio for firms with good corporate governance score and the bad portfolio for companies with low scores. Buy-and-hold returns are calculated on a monthly basis over one-year (12 months) and two-year (23 months) based on the closing prices.

To summarize this section, the good portfolio has outperformed the bad portfolio using the raw-returns, adjusted-returns, cumulative returns and the buy-and-hold returns. This is consistent with Gompers et al. (2003) and Bebchuk et al. (2009). While this can be taken as evidence that firms with better corporate governance perform better than companies with bad governance, the difference is not economically significant. Actually, both portfolios show the same patterns of negative and positive returns at the same time. To further investigate the relationship between corporate governance and stock returns, we move next to regression analysis.

4.2. Uni-variate and multi-variate estimates

It was argued that corporate governance issue is very complex to the extent that it is hard to capture all elements of it by only one scoring value Ertugrul and Hegde (2009). While it is good to have an index that ranks the companies according to their compliance degree with the regulations, it is hard to take the ratings and scoring as a definite measure of corporate governance performance. In this section, we report the results for the univariate and multi-variate estimates for the relationship between stock returns and corporate governance score. The dependent variable is the monthly adjusted-returns for the 90 companies, we pool all 90 companies together.

The results reveal that there is no association between the stock returns and the corporate governance scores. The coefficient for the corporate governance score is negative and very small, not significant in all models. We replace the score by a dummy variable where the good 45 companies takes a value of 1 and the bad 45 firms take zero and no link is found. In other words, stock returns cannot be explained by the corporate governance score. This is in line with Alanazi (2018) who find no link between corporate governance and operating performance. It is also consistent with Ertugrul and Hegde (2009) as well as Bhagat and Bolton (2008) who find no link between corporate governance ratings and operating performance among American companies. Although the good portfolio has outperformed the bad portfolio, the evidence here does not explain the difference.

Other independent variables are showing stronger explanation power for the variability of returns. This is particularly for the ownership and the board size. Ownership suggests that companies with larger government ownership percentages are showing higher returns. This is in line with Thomsen and Pedersen (2000) who document the link among 435 European firms. Furthermore, companies with larger board members are positively associated with higher returns. This contradicts the results of Yermack (1996) who find that smaller boards are better for firms' performance among 452 American firms. Cheng (2008) argue that smaller boards are better and quicker for decision making. Our finding suggests that larger boards are positively associated with higher stock returns. This can be explained the unique nature of the Saudi market where successful companies are usually large corporations with larger board size. Finally, the size of the company as measured by the market capitalization has a negative impact on the stock returns. Larger firms achieved lower returns, although the association is insignificant.

It seems that studies on the association between corporate governance and firms' performance should focus on the dimensions of corporate governance, rather than the overall corporate governance scores and ratings. In other words, the overall corporate governance score could not capture all elements of governance compliance and thus the focus should be on the dimensions such as the board of director dimension or the public disclosure dimension.

In summary, while the overall corporate governance score cannot explain the stock returns and performance variation, some corporate governance variables could explain this.

Table 4. Pooled OLS models of returns explanation

Dependent variables	*Returns*				
	Univariate	*Model 1*	*Model 2*	*Model 3*	*Model 4*
Intercept		0.0034	0.0005	-0.037	0.002
Corporate governance score	-0.0057	0	-0.0003	-0.0003	
Ownership	0.017**	0.0216**	0.0186***		0.0216**
Board size	0.0281***	0.031***		0.0256	0.031***
Size	-0.0012	-0.0012	-0.0017	0.0007	-0.0012
f-Stat		2.0426***	1.4534	1.1823	2.735**
Adjusted R square		0.0447	0.015	0.005	0.055

*Note: *, **, *** significant level at 1%, 5% and 10% respectively.*

This table reports the OLS estimates of the relationship between stock returns and corporate governance scores. The dependent variables are the average adjusted-returns for the 90 companies over two-year period. The independent variables are: the corporate governance score on the index on a scale of 1-100; Ownership represents the percentage of government ownership in the company; Board size is the standardized number of board members in the corporation; Size is the log of the company market capitalization.

5. CONCLUSION

This paper examines the relationship between corporate governance scores and stock returns in the emerging market. Exploiting a unique dataset on the corporate governance index from an emerging market of Saudi Arabia, we investigate whether firms' performance can be explained by the level of companies' adherence to the capital market regulations. We split firms on the index into two sub-samples of companies with good corporate governance scores and firms with bad governance scores.

We find that a good portfolio with good level of corporate governance score has outperformed firms with bad governance scores. A good portfolio has outperformed the bad portfolio on a monthly basis over two-year using the raw returns, adjusted-returns, cumulative abnormal returns and the buy-and-hold returns. This provides evidence for the support of the notion that good corporate governance leads to better firms' performance.

On the contrary, regression estimates do not support the association between governance scores and stock returns. We examine the relationship be regressing the governance score on the stock market adjusted-returns and no association is documented. In addition, we transform the governance scores into a dummy variable where good firms were given 1 and bad firms were given zero and no link is found. Nevertheless, returns can be explained by some items of corporate governance such as the board size and the ownership structures whom both have a significant association with returns. This raises an important issue of the need to focus on some governance items link with firms' performance. The question remains is what are the most important items of corporate governance.

We interpret the paper's results as weak evidence of the relationship between governance and performance that requires further investigation and much research. One of the paper's major limitations is the limit on the data because we examined only 90 companies and use the ranking of the index in 2015. Perhaps such an important topic requires much bigger sample size and longer time frame to see how governance and firms' performance evolves through time.

Future research might want to look at the corporate governance items individually, rather than the overall governance score or the rating on the index. Particular issues deserve much research would be the corporate governance dimensions (board of directors, shareholders rights, disclosure, etc.) link separately with firms performance. In addition, the impact of the change of corporate governance on firms performance as well as the causes of the changes in corporate governance scores.

REFERENCES

1. Adams, B. R., Hermalin, B. E., Weisbach, M. S. (2010). The role of boards of directors in corporate governance: A conceptual framework and survey. *Journal of Economic Literature, 48(1),* 58-107. https://doi.org/10.1257/jel.48.1.58
2. Alanazi, A. S. (2019). Corporate governance and firms' performance: Evidence from an emerging market. *Risk Governance and Control: Financial Markets and Institutions, 9(1),* 45-52. https://doi.org/10.22495/rgcv9i1p4
3. Al-Sahafi, A., Rodrigs, M., & Barnes, L., 2015. Does corporate governance affect financial performance in the banking sector? *International Journal of Economics, Commerce and Management*, *3(3),* 348-386.
4. Arora, A., & Bodhanwala, S. (2018). Relationship between corporate governance index and firm performance: Indian evidence. *Global Business Review*, *19(3),* 675-689. https://doi.org/10.1177/0972150917713812
5. Bainbridge, S. M. (2003). The means and ends of corporate governance. *Northwestern University Law Review, 97,* 547-606.
6. Barber, B. M., & Lyon, J. D., (1997). Detecting long-run abnormal stock returns: The empirical power and specification of test statistics. *Journal of Financial Economics. 43(3),* 341-372. https://doi.org/10.1016/S0304-405X(96)00890-2
7. Basu, S. (1977). The investment performance of common stocks in relation to their preice-to-earnings: A test of the efficient markets hypothesis. *Journal of Finance, 32(3),* 663-682. https://doi.org/10.1111/j.1540-6261.1977.tb01979.x
8. Basuony, M. A., Mohamed, E. K. A., & Al-Baidhani, A. M. (2014). The effect of corporate governance on bank financial performance: Evidence from the Arabian Peninsula. *Corporate Ownership & Control*, *11(2),* 178-191. https://doi.org/10.22495/cocv11i2c1p3
9. Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance? *The Review of Financial Studies*, *22(2),* 783-827. https://doi.org/10.1093/rfs/hhn099
10. Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance, 14(3)* 257-273. https://doi.org/10.1016/j.jcorpfin.2008.03.006
11. Braga-Alves, M., & Shastri, K. (2011). Corporate governance, valuation, and performance: Evidence from a voluntary market reform in Brazil. *Financial Management, 40(1),* 139-157. https://doi.org/10.1111/j.1755-053X.2010.01137.x
12. Buallay, A., Hamdan, A., Zureigat, Q. (2017). Corporate governance and firm performance: Evidence from Saudi Arabia. *Australian Accounting Business and Finance Journal, 11(1),* 78-98. https://doi.org/ 10.14453/aabfj.v11i1.6
13. Cheng, S. (2008). Board size and the variability of corporate performance. *Journal of Financial Economics, 87(1),* 157-176. https://doi.org/10.1016/j.jfineco.2006.10.006
14. Chidambaran, N. K., Palia, D., & Zheng, Y. (2006). *Does better corporate governance "cause" better firm performance?* Retrieved from https://pdfs.semanticscholar.org/d53f/661cae50c149502636284c35e73e5dde31c2.pdf
15. Claessens, S., & Yourglu, B. B. (2013). Corporate governance in emerging markets: A survey. *Emerging Markets Review*, *15,* 1-33. https://doi.org/10.1016/j.ememar.2012.03.002
16. Core, J. E., Guay, W. R., & Rusticus, T. O. (2006). Does weak governance cause weak stock returns? An examination of firm operating performance and investors' expectations. *Journal of Finance, 61(2),* 655-688. https://doi.org/10.1111/j.1540-6261.2006.00851.x
17. Cornelius, P. (2005). Good corporate practices in poor governance systems: Some evidence from the global competitiveness report. *Corporate Governance, 5(3),* 12-23. https://doi.org/10.1108/14720700510604661

18. Demsetz, H. (1983). The structure of ownership and the theory of the firm. *Journal of Law and Economics, 26(2),* 375-390. https://doi.org/10.1086/467041
19. Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy, 33*, 3-53.
20. Ryu, D., Ryu, J., & Hwang, J. H. (2017). Corporate governance, product-market competition, and stock returns: Evidence from the Korean market. *Asian Business & Management*, *16(1-2),* 50-91. https://doi.org/10.1057/s41291-017-0014-6
21. Dupuis, D., Spraggon, M., & Bodolica, V. (2017). Family business identity and corporate governance attributes: Evidence on family-owned enterprises in the UAE. *Corporate Ownership and Control*, *14(4),* 122-131. https://doi.org/10.22495/cocv14i4art11
22. Ertugrul, M., & Hegde, S. (2009). Corporate governance ratings and firm performance. *Financial Management, 38(1),* 139-160. https://doi.org/10.1111/j.1755-053X.2009.01031.x
23. Fahy, M., Roche, J., & Weiner, A. (2005). *Beyond corporate governance: Creating corporate value through performance, conformance and responsibility*. England: John Wiley & Sons Ltd.
24. Fama, E. F., & French, K. R. (1993). Common risk factors in the returns on Bonds and Stocks. *Journal of Finance, 33,* 30-56.
25. Gillan, S. L., Hartzell, J. C., & Starks, L. T. (2003). *Industries, investment opportunities and corporate governance structures* (TIAA-CREF Institute Working Paper). Retrieved from https://pdfs.semanticscholar.org/df95/dc1425d603bd4d5c96d308c0b20617edffe9.pdf
26. Gompers, P. A., Ishii, I. L., & Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics, 118(1),* 107-155. https://doi.org/10.1162/00335530360535162
27. Hassan, A. F. S., Karbhari, Y., Isa, A. A. M., & Razak, H. A. (2017). Board attributes and performance of government-linked companies (GLCS): Evidence from an emerging economy. *Corporate Ownership & Control, 14(3),* 74-83. https://doi.org/10.22495/cocv14i3art8
28. Keasey, K., & Wright, M. (1993). Issues in corporate accountability and governance: An editorial. *Accounting & Business Research, 23(91A),* 291-303. https://doi.org/10.1080/00014788.1993.9729897
29. Khanna, T., Kogan, J., &Palepu, K. (2006). Globalization and corporate governance convergence? A Cross-Country Analysis. *The Review of Economics and Statistics, 88(1),* 69-90
30. Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection and performance in emerging markets. *Journal of Corporate Governance, 10(5),* 703-728. https://doi.org/10.1016/S0929-1199(03)00046-4
31. Kouwenberg, R., Salomons, R., & Thontirawong, P. (2014). Corporate governance and stock returns in Asia. *Journal Quantitative Finance, 6(14),* 965-976. https://doi.org/10.1080/14697688.2012.762603
32. Lehn, K., Patro, S., & Zhao, M. (2007). Governance Indices and valuation multiples: Which causes which? *Journal of Corporate Governance, 13(5),* 907-928. https://doi.org/10.1016/j.jcorpfin.2007.07.002
33. Molz, R. (1985). The role of the board of directors: Typologies of interaction. *Journal of Business Strategy, 5(4),* 86-93. https://doi.org/10.1108/eb039091
34. Ravenscraft, D. J. (1996). Ownership and control: Rethinking corporate governance for the twenty-first century. *Journal of Economic Literature, 34(4),* 19-71.
35. Ritter, J. R. (1991). The long-run performance of initial public offerings. *Journal of Finance, 46(1),* 3-27. https://doi.org/10.1111/j.1540-6261.1991.tb03743.x
36. Seifzadeh, P. (2015). CEO resistance: The role of BOD dependence/independence and CEO profile. *Corporate Ownership & Control, 13(1-6),* 652-662. https://doi.org/10.22495/cocv13i1c6p4
37. Sharma, V., Naiker, V., & Lee, B. (2009). Determinants of audit committee meeting frequency: Evidence from a voluntary governance system. *Accounting Horizon, 23(3),* 245-263. https://doi.org/10.2308/acch.2009.23.3.245
38. Smith, C. W., & Watts, R. L. (1992). The investment opportunity set and corporate financing, dividend and compensation policies. *Journal of Financial Economics, 32(3),* 263-292. https://doi.org/10.1016/0304-405X(92)90029-W
39. Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal, 21(6),* 689-705. https://doi.org/10.1002/(SICI)1097-0266(200006)21:6<689::AID-SMJ115>3.0.CO;2-Y
40. Yermack, D. (1996). Higher market valuation for firms with a small board of directors. *Journal of Financial Economics, 40(2),* 185-211. https://doi.org/10.1016/0304-405X(95)00844-5