The Effect of Voluntary Governance Rating Disclosures on SEOs and Acquisitions[1]

Birgül Arslan
Koç University
Rumelifeneri Yolu, Sariyer
34450, Istanbul, Turkey
biarslan@ku.edu.tr
office: +90 212 338 18 99
fax: +90 212 338 16 53

Uğur Çelikyurt
Koç University
Rumelifeneri Yolu, Sariyer
34450, Istanbul, Turkey
ucelikyurt@ku.edu.tr
office: +90 212 338 16 81
fax: +90 212 338 16 53

ABSTRACT

Voluntary disclosures play an increasingly larger role in the corporate world, yet their implications remain controversial. On the one hand, voluntary disclosures create value by decreasing information asymmetry between managers and investors. On the other hand, they may be used opportunistically by the managers in capital market transactions and corporate development activities. We contribute to this debate by examining the effect of firms' voluntary disclosures of corporate governance ratings on the timing and performance of seasoned equity offerings (SEOs) and acquisitions. We conduct our analyses within the context of Turkey, one of the countries in which corporate governance scores are obtained on a voluntary basis. We find that firms which voluntarily disclose their governance ratings are less likely to undertake both SEOs and acquisitions which are commonly associated with managerial opportunism. Furthermore, these firms experience higher abnormal stock returns from the announcement of SEOs and acquisitions suggesting that voluntary disclosures of governance ratings provide credible signals to investors.

Keywords: Corporate Governance; Governance Ratings; Voluntary Disclosure; Seasoned Equity Offerings; Acquisitions
JEL Classification: G30, G32, G34

[1] This research has received financial support from the Academic Research Support program of the Corporate Governance Association of Turkey. The Association did not have any involvement in the conduct of the research and/or the preparation of the article.

1 INTRODUCTION

The issues around corporate governance pertain to the very private affairs among shareholders, directors, and managers. Indeed, in the history of corporate reporting, firms have rarely disclosed their governance information compared to their financial information. According to the 2013 KPMG Survey of Corporate Responsibility Reporting, only 9% of reporting companies worldwide provided governance and social responsibility information in their 2008 annual reports. The fraction of disclosing companies exceeded 50% only after 2013. Given the weak regulatory requirements on the disclosure of corporate governance practices, it remains unclear why some firms voluntarily disclose their governance ratings.

Scholars argue that, on the one hand, voluntary disclosures are beneficial for the firm. They reduce information asymmetry between external investors and managers, who are in possession of internal information, thereby improving the liquidity of firms' shares (Coller and Yohn, 1997; Balakrishnan *et al*., 2014), decreasing the cost of capital (Botosan, 1997; Diamond and Verrecchia, 1991; Botosan and Plumlee, 2002) and, in turn, increasing firm value (Brennan and Subrahmanyam, 1996; Amihud, 2002).

On the other hand, voluntary disclosures open up the possibility of opportunistic behavior on the part of managers to unduly influence market perceptions and stock prices, termed as market conditioning or hyping (Lang and Lundholm, 2000; Shroff *et al*., 2013). This concern is especially relevant for voluntary disclosures timed before planned capital market transactions and corporate development activities, such as seasoned equity offerings (SEOs), stock repurchases and acquisitions. The timing of such events is private information of managers and they have much to be gained from a temporary change in stock prices (Jo and Kim, 2007; Lang and Lundholm, 2000).

These opposing views motivate our study. We investigate the relationship between voluntary disclosures of corporate governance ratings and firms' capital market transactions

(specifically SEOs) and corporate development activities (specifically acquisitions) in terms of their timing and their effect on firm value. By studying their timing, the study aims to understand whether voluntary governance rating disclosures are opportunistic market conditioning maneuvers before planned SEOs and acquisitons. Furthermore, the study compares the investor reactions to SEOs and acquisitions by rated and unrated firms to understand whether voluntary governance ratings help increase firm value.

This paper aims to contribute to the literature in the following ways. First, the existing literature on voluntary disclosures remains largely focused on voluntary disclosures of financial performance of the firm in the form of quarterly earnings reports and forecasts. However, disclosures of non-financial information such as environmental, social and governance performance remain rather unexplored although they have become equally important communication factors to investors (Dimson, Karakaş and Li, 2015). We bridge this gap by studying a type of non-financial voluntary disclosure, namely the corporate governance rating the firm obtains from independent rating agencies.

Second, we contribute to the debate on firms' voluntary disclosure behavior from the perspective of the credibility and the quality of the disclosure. Attribution theory suggests that investors may discount favorable information unless the disclosure of the information is reliable (Mercer, 2004). The disclosures of governance ratings are distinct from other voluntary disclosures because the decision to obtain the governance rating is under the discretion of the management but the rating itself is determined by external rating agencies beyond the control of the management. As such, they provide potentially more credible information to shareholders. Therefore, disclosure of governance ratings is different from other voluntary disclosures in terms of managerial discretion which helps us to disentangle the opposing views on managers' motives behind their voluntary disclosures.

Third, our paper contributes to the literature on governance transparency, i.e. managers' choice on increasing transparency in firms' governance. While most of the literature focuses on the determinants of increasing governance transparency (e.g. Aksu and Kosedag, 2006; Barako, Hancock, and Izan, 2006; Bauwhede and Willekens, 2008; Laidroo, 2009; Elshandidy and Neri, 2015), less attention has been paid to its effects on firms' corporate strategy. This study fills this gap by examining the impact of the governance rating disclosure on the timing and value creation effect of SEOs and acquisitions.

Lastly, this paper links ethical aspects of managerial behavior and corporate governance with firm strategy in terms of financing and investment decisions through SEOs and acquisitions. While governance has been previously linked to firm financial performance, its relationship with strategic actions has been understudied and remains underrepresented in strategic management research (Robertson et al., 2013).

We find that voluntary disclosure of corporate governance ratings decreases the likelihood of subsequent SEO and acquisition activity. If governance rating disclosures were merely opportunistic actions for temporary stock price inflation, they would be related with an increase in subsequent SEO or acquisition activity since both SEOs and acquisitions are most beneficial when the firm's stock price is at a high level. Our findings show the opposite: Firms which voluntarily disclose their governance ratings are less likely to conduct SEOs and acquisitions subsequently, which are generally accepted to be risky and value-destroying corporate actions (Aybar and Ficici, 2009; Netter, Stegemoller, and Wintoki, 2011). Our findings therefore suggest that, contrary to the market conditioning hypothesis, firms do not use governance ratings opportunistically.

Furthermore, we find that firms which disclose their corporate governance ratings experience higher abnormal stock returns around SEO and acquisition announcements. The SEOs and acquisitions of rated firms increase firm value suggesting that voluntary disclosures of

governance ratings provide compelling rather than suspicious signals to the investors. Overall, our results indicate that firms which disclose their governance ratings are perceived to be more selective rather than opportunistic in their financing and investment decisions.

Our empirical setting is Turkey which provides an ideal setting for analyzing voluntary disclosures of corporate governance scores. Unlike in other countries where corporate governance scores are made publicly available for the majority of listed firms, companies in Turkey apply voluntarily to be subject to a corporate governance evaluation.[1] Similar corporate governance rating frameworks are documented for China and Peru as well, where companies apply voluntarily to be subject to a corporate governance evaluation (Grimminger and Di Benedetta, 2013). This setting allows for isolating the effect of this specific type of information revealed about firms' corporate governance practices on their subsequent investment and financing decisions. We use a manually-constructed dataset of firms listed on Borsa Istanbul (BIST). Since the first corporate governance rating disclosure in 2007, 58 BIST companies have started disclosing their governance ratings which are determined by the accredited rating agencies registered with the Capital Markets Board (CMB) of Turkey. We analyze the timing and value creation effect of SEOs and acquisitions by rated and all other unrated companies in the period between 2007 and 2015 using a panel dataset that contains information on firms' governance ratings, SEOs, acquisitions, and other financial information.

2 THEORETICAL BACKGROUND

Above and beyond the regulatory requirements, managers can choose to disclose additional information within annual reports, press releases, conference calls, analyst meetings and corporate websites. The voluntary information frequently includes quarterly earnings, earnings forecasts,

[1] Specifics of the corporate governance practices in Turkey are provided in Appendix.

business segment performance, market shares, as well as non-financial information on corporate responsibility activities and firms' environmental, social and governance performance. While scholars question the credibility of voluntary disclosures (Frost, 1997), they have become a prominent source of information for investors since they explain a much higher variation in the firms' quarterly returns compared to the firms' mandatory disclosures (Beyer *et al*., 2010).

There are two contradictory arguments on what motivates managers for voluntary disclosures. The capital market transaction hypothesis states that the primary reason for voluntary disclosures is to reduce the information asymmetry between managers and potential investors (Healy and Palepu, 2001), and hence, they are beneficial for the firm and its shareholders. Accordingly, studies have found that increases in voluntary disclosures are indeed associated with a reduction in the cost of capital (Botosan, 1997; Diamond and Verrecchia, 1991; Botosan and Plumlee, 2002). Then, it is beneficial for firms to increase the information available to the investors especially before planned capital market transactions. In line with this argument, research has shown that firms significantly increase their disclosure frequency around the time of equity offerings and debt issues (Healy, Hutton, and Palepu, 1999; Lang and Lundholm, 1993, 2000; Collett and Hrasky, 2005). The market conditioning hypothesis, on the other hand, states that managers use voluntary disclosures for opportunistic gains. Accordingly, stock- and performance-based compensation schemes provide incentives for managers to either depress (e.g. before stock awards) or inflate (e.g. before selling stock) their firms' stock prices by using voluntary disclosures. Studies have shown that, for instance, managers provide a dimmer outlook for their firms in periods of stock purchases (Cheng and Lo, 2006), and they are more likely to increase voluntary disclosures by delaying good news and rushing forward bad news to maximize their stock option compensation prior to the stock option awards (Aboody and Kasznik, 2000). Similarly, managers receiving

compensation in cash might engage in earnings manipulation to return their firms' credit ratings to expected levels (Iatridis, 2018).

Research on the consequences of voluntary disclosures is more limited and remains largely focused on the financial performance of the firm. Evidence suggests that voluntary disclosures increase the liquidity of firms' shares (Coller and Yohn, 1997; Balakrishnan *et al*., 2014), decrease their cost of capital (Botosan, 1997; Diamond and Verrecchia, 1991; Botosan and Plumlee, 2002) and, in turn, increase firm value (Brennan and Subrahmanyam, 1996; Amihud, 2002; Balakrishnan *et al*., 2014). Furthermore, the research has shown that voluntary disclosures increase analyst coverage (Francis, Khurana, and Pereira, 2005; Healy, Hutton, and Palepu, 1999), and the suspension of voluntary disclosures is associated with a decrease in analyst coverage as well as deterioration in forecast accuracy (Houston, Lev, and Tucker, 2010).

Firms will benefit most from their voluntary disclosures in the periods before capital market transactions and corporate development events as it is in these periods when stock prices matter the most. In the case of SEOs, an increase in firm valuation associated with voluntary governance disclosures in the pre-SEO period will increase the offer price, the investor demand, and consequently the SEO's proceeds. Lang and Lundholm (2000) report that firms are more likely to release optimistic statements before SEOs. In the case of acquisitions, the acquirer's voluntary disclosure can play two important roles. First, by diminishing the information asymmetry between the acquirer and the target, voluntary disclosures of corporate governance will decrease the likelihood of defense on the part of the target firm and secure easier shareholder approval. Second, since acquirer's stock might be used as the currency for target acquisitions, higher valuation and liquidity of the acquirer's stock after the voluntary disclosure will decrease the cost of acquisition especially when the deal is arranged through the transfer of company stock. Managers might

therefore voluntarily disclose their firms' governance ratings in order to increase their firms' stock prices and liquidity prior to planned SEO and acquisition events.

The existing literature on SEO and acquisition performance suggests that both SEO and acquisition announcements are associated with negative impacts on shareholder value. In the case of SEOs, the information asymmetry between the issuers and potential investors raises concerns about the proper use of the SEO funds. Therefore, they are associated with depressed shareholder returns (Myers and Majluf, 1984; Loughran and Ritter, 1995; Spiess and Affleck-Graves, 1995). Furthermore, there is accumulated evidence that SEOs are opportunistically timed by managers exploiting overvalued stock prices (e.g. Pagano, Panetta, and Zingales, 1998; Hovakimian, Opler, and Titman, 2001) without legitimate reasons for raising additional equity.

Similarly, acquisitions have been shown to destroy shareholder value. In a study with a large sample of acquisitions; Netter, Stegemoller, and Wintoki (2011) showed that 46% of acquisitions generated negative abnormal returns. Similarly, Aybar and Ficici (2009) document that, on average, international acquisitions decrease firm value. One reason is reliance on overly optimistic expectations on synergy creation and the difficulties associated with their realization (Zaheer, Castañer, and Souder, 2013; Capron and Guillen, 2009). It is also documented that most of the expected synergies are appropriated by the target firms. Targets are typically overpaid and their share in acquisition gains has been increasing over time (Netter, Stegemoller, and Wintoki, 2011). Moreover, acquisitions are also associated with self-interest on the part of managers because they increase managerial compensation (Harford and Li, 2007; Ozkan, 2012; Grinstein and Hribar, 2004) and reduce the risk of unemployment (Haleblian and Finkelstein, 1993). Furthermore, managers diverge from value maximization in acquisition decisions when they receive excess compensation (Feito-Ruiz and Renneboog, 2017).

Overall, the negative performance consequences of SEOs and acquisitions are attributed to the information asymmetry between managers and investors paving the way for managerial opportunism. While increasing transparency through voluntary disclosures can potentially solve this problem, the discretion that the management has over the timing and the quality of these disclosures results in a dilemma: the voluntary disclosures themselves can, too, be manipulative. Indeed, research has shown that voluntary disclosures do not necessarily decrease the information asymmetry. On the contrary, announcement returns to SEOs are found to be more negative when preceded by voluntary disclosures (Jo and Kim, 2007). The key to solving the problem, then, is to restrict management's discretion over the disclosure. Corporate governance ratings provide such a solution; although the decision to obtain the governance rating is voluntary, the rating itself is determined by an external agency. Since the rating agencies are independent and specialized, the governance ratings provide credible information to the investors. Therefore, voluntary disclosures of governance ratings can decrease the information asymmetry between managers and investors prior to planned capital market transactions and corporate development activities. Hence, we expect higher SEO and acquisition announcement returns for firms which obtain governance ratings.

In sum, the literature on voluntary disclosures reveals that they provide rather mixed signals to the investors, and the associated motives are unclear. Scholars, therefore, call for further research to better understand the motivation for voluntary disclosures, especially in relation to capital market transactions (Jo and Kim, 2007). If the disclosure decision is for the firm's best interests, we should observe positive performance effects. If, on the other hand, the disclosure is motivated rather by managerial incentives, the firms should display lower performance. It is, however, very difficult, if not impossible, to directly observe managers' intentions. Instead, we propose to address this issue by focusing on the timing of managers' financing and investment decisions and their performance consequences. We first examine whether rated firms, i.e. those voluntarily disclosing their

governance ratings, engage in more SEOs and acquisitions compared to unrated firms. Next, we investigate the differences in performance implications of SEOs and acquisitions among rated and unrated firms. This gives us the opportunity to make inferences about the motivations behind the disclosure decisions.

3 DATA AND DESCRIPTIVE STATISTICS

We conduct our analyses on a comprehensive dataset of all public firms whose shares were traded on BIST for at least one year in the period between 2007 and 2015. Corporate Governance Association of Turkey discloses the corporate governance rating scores of firms which have opted for the assessment of their governance. The data on SEO activity of BIST companies come from Securities Data Company's (SDC) New Issues database, and the data on acquisition activity come from the SDC's Mergers and Acquisitions database. Firm financials are obtained from Rasyonet Database, which covers all BIST firms in the sample period.

The yearly distribution of public firms and the governance rating disclosures are shown in Table 1. The number of firms which start to disclose their governance rating varies over time, with a maximum of 12 new disclosures in year 2009, and totaling 58 firms as of 2015, which corresponds to 13.5% of all listed firms. The mean governance score increased over time from 77.40 in 2007 to 90.93 in 2015, indicating a better compliance of firms with the higher corporate governance principles over time.

--- *Insert Table 1 around here* ---

Table 2 presents summary statistics of financial information for rated and unrated firms. A comparison of firm sizes shows that rated firms are larger than unrated firms. Specifically, rated firms on average have total assets of TRY 3,410 million ($1,943 million) and market capitalization of TRY 2,534 million ($1,441 million), whereas unrated firms have total assets of only TRY 1,418 million ($780 million) and market capitalization of TRY 566 million ($322 million), the difference

being statistically significant at the 1% level for both assets and market capitalization. Table 2 also shows that rated firms are more mature than unrated firms, and they have better operating performance measured by return on assets, the differences being statistically significant at the 1% level. Finally, we find that rated firms have significantly lower Tobin's Q which is a proxy for firms' future growth opportunities.

--- Insert Table 2 around here ---

The size of rated and unrated firms could be a significant factor affecting their decisions to apply for a governance rating if the cost of obtaining this rating from an accredited rating agency was prohibitively high. We find that this cost does not seem to be a significant financial barrier to obtaining governance ratings.[2] To alleviate any remaining concern that different firm characteristics might affect a firm's investment and financing strategies and also its decision to obtain a governance rating, we perform our analyses on a matched sample of rated and unrated firms where the matching is based on firms' propensity to disclose governance ratings depending on their age, size, return on assets and industry. Table 2 also provides summary statistics of firm financials for the group of matched firms. Compared to the unrated group as a whole, the financials of these matched unrated firms are closer to those of rated firms.

4 EMPIRICAL DESIGN

Our sample of BIST companies includes rated and unrated firms, which do or do not conduct capital market transactions (specifically SEOs) and corporate development activities (specifically acquisitions) within the period from 2007 to 2015. We employ multivariate models to investigate

[2] For example, according to the pricing framework set by JCR Eurasia Rating –one of the accredited rating agencies registered with CMB– firms applying for a governance rating will be charged a fee that ranges from $7,000 to $15,000 depending on firm size. With $15,000 being the upper limit, the cost of rating does not seem to be an obstacle to the firms' decision to apply for a governance rating.

whether the likelihood and the performance of SEOs and acquisitions of rated firms differ from unrated firms, i.e. firms that choose not to enter into the governance rating framework.

The main issue with the voluntary application for and the subsequent disclosure of a corporate governance rating is that only firms with good governance practices, which are potentially qualifying for a high rating, would apply whereas firms with poor governance practices would simply choose not to apply, leading to a self-selection bias. It is then difficult to assess whether a reported relation between the governance rating and the subsequent SEO or acquisition activity is attributable to the disclosure per se or to other underlying characteristics of the firm driving both. The corporate governance research is typically plagued with such endogeneity concerns (Healy and Palepu, 2001).

We address the potential endogeneity by employing the *propensity score matching* method, where each rated firm is matched to two firms that are not rated, based on their propensity to disclose governance ratings depending on their industry, average age, size, and return on assets over the sample period. Using this methodology, we are able to compare strategic corporate activities of firms that are treated (i.e. that are rated) to firms that are not treated (i.e. that are unrated) after controlling for their propensity to receive governance rating.

One issue with the propensity score matching is that it is based on observable firm characteristics. However, it is possible that there are some unobservable factors driving both the voluntary disclosure of the corporate governance rating of public firms and these firms' equity offerings and acquisitions. In order to address this issue and remove the potential omitted variable bias, we also use *fixed effects model* which exploits the within-firm variation in the variable of interest over time.

We test whether the likelihood and the performance of capital market transactions and corporate development activities of rated firms differ from unrated firms in a multivariate

framework. Our main variable of interest is *Governance Rating* which is an indicator variable that takes the value of one if the firm has disclosed its governance score in a given year and zero otherwise. We also include firm characteristics that are found to have a significant effect on corporate activities in existing literature such as firm size, firm age, Tobin's Q, return on assets, leverage, and free cash flow as control variables in our models. Moreover, all our models include firm or industry fixed effects.

5 RESULTS

5.1 Likelihood of Corporate Activities

We employ logit models to estimate the effect of governance rating disclosure in year *t* on the likelihood of undertaking SEOs (acquisitions) in years *t+1* or *t+2* while controlling for several other firm characteristics. For each corporate activity, we first run the model for the whole BIST sample and then for a matched sample of rated and unrated firms, which is obtained using propensity score matching, to control for the endogenous nature of governance rating disclosure.

We use two different logit specifications. Our primary choice of logit specification is a logit model with firm fixed effects that will remove the potential omitted variable bias associated with unobservable factors that might affect the governance rating disclosure choice as well as firms' decisions on certain corporate actions. As a robustness check, we also report the results for logit models with random effects at the firm level.

The following logit models are estimated for our panel dataset over nine years, where *i* denotes the sample firms and *t* denotes the years:

$$P(SEO_{it+2} = 1) = L[\alpha + \beta_1 Governance\_Rating\_Indicator_{it} + \beta_2 Firm\_Size_{it} + \beta_3 Tobin's\_Q_{it} + \beta_4 Firm\_Age_{it} + \beta_5 Return\_on\_Assets_{it} + \beta_6 Leverage_{it} + \beta_7 Free\_Cash\_Flow_{it}]$$

$$P(ACQ_{it+2} = 1) = L[\alpha + \beta_1 Governance\_Rating\_Indicator_{it} + \beta_2 Firm\_Size_{it} + \beta_3 Tobin's\_Q_{it} + \beta_4 Firm\_Age_{it} + \beta_5 Return\_on\_Assets_{it} + \beta_6 Leverage_{it} + \beta_7 Free\_Cash\_Flow_{it}]$$

where SEO_{it+2} (ACQ_{it+2}) takes the value of one for a given firm *i* if the firm undertakes at least one SEO (acquisition) in years *t+1* or *t+2*, and zero otherwise, *P* denotes the probability and *L* denotes the standard logistic distribution function.[3] Table 3 presents the coefficient estimates of the logit models.

--- *Insert Table 3 around here* ---

In models (1)-(4) of Table 3, we estimate the likelihood of BIST firms to undertake SEOs following the disclosure of their governance ratings. In both model (1), where we use the full sample with firm fixed effects, and model (2), where we use the matched sample with firm fixed effects, the coefficient of *Governance Rating* is negative and statistically significant at the 1% level, indicating that the disclosure of the governance score is associated with a lower likelihood of conducting a subsequent SEO. The coefficient estimates on *Governance Rating* are also statistically significant when random effects model is used. Specifically, in models (3) and (4) for the full and matched samples, respectively, the coefficient on *Governance Rating* is negative and statistically significant at the 5% level. The predicted effect of the governance rating disclosure on the likelihood of undertaking SEOs is economically significant as well. According to the estimates in model (2), having disclosed the governance rating translates into a 78% decrease in the odds of undertaking SEOs within the two years after the disclosure.

In models (5)-(8) of Table 3, we estimate the likelihood of BIST firms to conduct acquisitions following the disclosure of their governance ratings. The coefficient of *Governance Rating* is negative and statistically significant at the 5% level in both model (5), where we use the full sample with firm fixed effects, and model (6), where we use the matched sample with firm

[3] See Appendix for detailed descriptions of variables.

fixed effects. This indicates that the disclosure of the governance score is associated with a lower likelihood of conducting an acquisition following the disclosure of the score. As is the case in SEO models, the coefficient estimates on *Governance Rating* are also statistically significant when random effects model is used. Specifically, in models (7) and (8) for the full and matched samples, respectively, the coefficient on *Governance Rating* is negative and statistically significant at the 10% level. The predicted effect of the governance rating disclosure on the likelihood of conducting acquisitions is economically meaningful. The estimates in model (6) indicate that having disclosed the governance rating translates into a 62% decrease in the odds of undertaking acquisitions within the two years after the disclosure.

To check the sensitivity of our findings to the choice of observation period of two years after the governance rating disclosure, we perform a robustness analysis where we estimate fixed-effects logit models on the likelihood of conducting SEOs and acquisitions within one year following the disclosure. The results, reported in Table 4, remain the same indicating that the findings are robust to the choice of observation period.

--- Insert Table 4 around here ---

Overall, our findings provide evidence that firms are less likely to undertake SEOs and acquisitions following their governance rating disclosures. Rated firms do not show signs of market conditioning through corporate governance disclosures before planned SEOs and acquisitions as opposed to other types of voluntary disclosures, in case of which we would expect to observe an increase in the intensity of these corporate activities.

5.2 Announcement Returns of Corporate Activities

We study the market reaction to SEOs and acquisitions by our sample firms in order to assess their value creation implications for shareholders. We follow the standard event study methodology of Brown and Warner (1985) to measure the abnormal returns associated with the corporate events.

We use the return on BIST 100 Index as the market return and estimate the market model parameters over the interval from 250 to 50 days prior to the announcement day. We calculate cumulative abnormal returns (CARs) over the 11-day announcement window [-5,+5] for each activity undertaken by our sample of public firms, where day 0 corresponds to the announcement day of the corporate event. We choose 11 days around the announcement day since, in emerging markets, it takes longer for the effects of corporate events to be fully reflected in stock prices (Gubbi *et al*., 2010). As a robustness check, we also report our findings in alternative event windows of [-3,5] and [-3,3].

We first explore the abnormal returns around four different event announcements, namely the initial governance rating disclosures, subsequent governance rating disclosures, SEO filing announcements, and acquisition announcements. We calculate CARs for these events to address the question of whether these events help create value for public firms. Table 5 presents the results. The mean CARs turn out to be positive but not statistically significant for both the initial and the subsequent governance rating disclosures, indicating that the disclosures per se do not have significant value creation effects. This is in line with the argument that, above a threshold level of governance regulations, there are diminishing returns to exceeding governance requirements (Bhat et al., 2006; Harp et al., 2014). SEO filings, on the other hand, are associated with significantly negative abnormal returns around their announcements. For the 158 SEO filings during our sample period, the mean CAR over days [-5,+5] is -9.88% and statistically significant at the 1% level. While the mean abnormal returns of both rated and unrated firms are negative, we find that the average negative abnormal return of the overall sample is driven by SEO announcements by unrated firms which experience a mean CAR over days [-5,+5] of -10.08% being statistically significant at the 1% level. This finding implies that the SEOs by rated firms are not as value-destroying as those by unrated firms.

--- Insert Table 5 around here ---

Acquisition announcements by our sample firms are associated with positive abnormal returns. For the 313 acquisition announcements during our sample period, the mean CAR over days [-5,+5] is 0.75% but not statistically significant. Splitting the sample between rated and unrated firms, we find that rated firms experience significantly positive abnormal returns around their acquisition announcements in contrast to unrated firms which experience insignificant returns. Specifically, the mean CAR for rated firms over days [-5,+5] is 3.49% and statistically significant at the 5% level implying that acquisitions by these firms are value-adding. Overall, the univariate statistics in Table 5 suggest that compared to unrated firms, rated firms experience higher abnormal returns around their SEO and acquisition announcements.

In the next step, we conduct multivariate analyses on announcement returns, where the dependent variable is the public firm's CAR over alternative event windows around the announcement day, and the events being SEOs and acquisitions.

We estimate the following OLS models, where *i* denotes the firms and *t* denotes the years associated with the event announcements:

$$\begin{aligned} CAR\_SEO_{it} = \alpha &+ \beta_1 Governance\_Rating\_Indicator_{it} + \beta_2 Relative\_Offer\_Price_{it} \\ &+ \beta_3 Relative\_Deal\_Size_{it} + \beta_4 Specific\_Use\_of\_Funds_{it} \\ &+ \beta_5 Number\_of\_SEOs\_in\_last3years_{it} + \beta_6 Firm\_Size_{it} + \beta_7 Tobin's\_Q_{it} \\ &+ \beta_8 Return\_on\_Assets_{it} + \beta_9 Firm\_Growth_{it} \end{aligned}$$

$$\begin{aligned} CAR\_ACQ_{it} = \alpha &+ \beta_1 Governance\_Rating\_Indicator_{it} + \beta_2 Cash\_Only_{it} \\ &+ \beta_3 Full\_Acquisition_{it} + \beta_4 Public\_Target_{it} + \beta_5 Foreign\_Target_{it} \\ &+ \beta_6 Diversifying\_Acquisition_{it} + \beta_7 Number\_of\_ACQs\_in\_last3years_{it} \\ &+ \beta_8 Firm\_Size_{it} + \beta_9 Tobin's\_Q_{it} + \beta_{10} Return\_on\_Assets_{it} \\ &+ \beta_{11} Firm\_Growth_{it} \end{aligned}$$

where we also include year and industry dummies.

Table 6 reports estimates of regression models where we analyze the effect of governance rating disclosure on SEO announcement abnormal returns in models (1)-(3), and on acquisition

announcement abnormal returns in models (4)-(6). Our main variable of interest in these regression models is again *Governance Rating* which is an indicator variable taking the value of one if the firm has disclosed its governance score prior to the SEO or acquisition and zero otherwise. The regressions control for deal characteristics as well as firm characteristics such as firm size, Tobin's Q, return on assets and firm growth, and also include year and industry fixed effects. For the analysis of SEO announcement returns, we control for deal characteristics such as the relative offer price, relative deal size, specific use of funds, and the number of SEOs conducted in the three years before the focal SEO. For the analysis of acquisition announcement returns, we control for the method of payment, the public status of the target, whether the target is fully acquired, whether the target is incorporated in a foreign country, whether the deal entails diversification, and the number of acquisitions conducted in the three years before the focal acquisition.

--- *Insert Table 6 around here* ---

Model (1) of Table 6 on CARs over days [-5,+5] of SEO announcements shows that the coefficient on *Governance Rating* is positive and statistically significant at the 5% level. In models (2) and (3) on CARs over shorter time windows the coefficient on *Governance Rating* is positive and statistically significant at the 10% level. These estimations indicate that the disclosure of the corporate governance score improves the firm's ability to undertake equity offerings with greater value creation effect. Having disclosed a governance rating is associated with 13.2% higher CAR over days [-5,+5], which is economically sizeable given that the mean CAR for SEOs is -9.88% for the related sample. These findings indicate that SEOs by firms that have disclosed their governance rating are viewed more positively compared with firms with no such disclosure.

We obtain similar results for models (4) and (5) on CARs of acquisition announcements, where the coefficient on *Governance Rating* is positive and statistically significant at the 5% level, indicating that acquisitions by firms that have disclosed their governance rating are viewed more

positively compared with firms with no such disclosure. This result is consistent with the hypothesis that the disclosure of the corporate governance score decreases the information asymmetry between managers and investors, thereby resulting in greater value creation during acquisition announcements. Having a disclosed governance rating is associated with 10% higher acquirer CAR over days [-5,+5], which is an economically meaningful effect considering that the average acquirer CAR for acquisitions is 0.75% for the related sample. The coefficient on *Governance Rating* in model (6) is still positive but not statistically significant over the period [-3,+3]. The effect of the acquisition may not have been fully reflected in stock prices over this shorter time period. Overall, our results suggest that while SEOs and acquisitions are generally viewed as value destroying events, for firms that have voluntarily revealed their corporate governance ratings, these corporate activities are vehicles for value creation.

5.3 Sample Selection Bias

In the previous analyses, we only observe CARs of firms with SEOs or acquisitions, leaving out the firms which do not engage in SEOs or acquisitions within the sample period. This might potentially induce a self-selection bias in our analyses. MacKinlay (1997) points out that the relation between firm characteristics and the degree of anticipation of a corporate event introduces a selection bias, and consistent estimators should be derived by explicitly incorporating the selection bias. Due to this potential sample selection problem, we estimate our CAR models by Heckman's (1979) two-step procedure as well, where we analyze the relation between corporate governance rating disclosures and cumulative abnormal returns around SEO and acquisition announcements by taking the selection effect into account. This procedure not only estimates the coefficients in the main model (i.e., the CAR model in our study) but also tests whether the error terms in the selection model and the main model are correlated due to a selection bias. In our

analysis, the selection model is a probit model which estimates the likelihood of firms undertaking a corporate event such as an SEO or an acquisition during the sample period.

We find that the coefficient for Heckman's lambda in the two-stage model is statistically significant only for the acquisition decisions, indicating that selection is not an issue for SEO decisions but there is a significant selection bias for acquisition decisions. In Table 7, where we report the estimation results of Heckman's model for CARs around acquisition announcements, we get results consistent with our previous findings. Specifically, we find that having a disclosed governance rating is associated with 8.7% higher acquirer CAR over days [-5,+5], which is statistically significant at the 5% level. Overall, we verify our previous finding that acquisitions are viewed positively by investors when firms have disclosed their governance ratings even after we take the selection bias into account.

--- *Insert Table 7 around here* ---

6 CONCLUSION AND DISCUSSION

We study the effect of voluntary disclosures of corporate governance ratings on capital market transactions and corporate development activities of firms trading on BIST. We find that firms which disclose their governance ratings are less likely to undertake seasoned equity offerings and acquisitions in the subsequent periods as compared to firms that are not rated. This is contrary to the argument that firms increase their voluntary disclosures in the periods leading to capital market transactions to condition the market sentiment positively to make undue returns from such transactions. We also find that firms experience significantly higher announcement abnormal returns from SEOs and acquisitions if they have disclosed their governance rating in advance.

Among the two competing hypotheses on voluntary disclosures, our results provide support for the more positive view underlining the reduction of information asymmetry between managers and investors rather than the view based on managerial opportunism. Publicly traded firms with

governance rating disclosure undertake SEOs and acquisitions less frequently, perhaps more selectively, than their unrated counterparts. This, in turn, helps the firm generate positive perception among investors and gain higher value through the selective set of corporate activities. This is in line with the idea that a key reason for stock exchanges to launch corporate governance indices is to help companies distinguish themselves from others with a label of governance excellence (Grimminger and Di Benedetta, 2013). Voluntary disclosure of governance ratings help rated firms differentiate themselves from other comparable firms in the market in terms of capital raising ability and value creation through acquisitions.

The main issue with voluntary disclosures is the discretion the management has over the timing and content of the disclosure. Absent a mechanism of verification, it is very difficult, if not impossible, to identify the true nature of the disclosures and differentiate among opportunistic and transparency motives. In such a case, investors may discount the newly available information (Mercer, 2004). Our findings suggest that managers can overcome this problem by incorporating an external verification mechanism into their voluntary disclosures. Given that firms' environmental, social and governance performance takes an increasingly significant role in voluntary disclosures, firms will be better off supplementing such disclosures by providing systematic external assessments rather than merely providing ad-hoc, unsystematic information through internally developed press releases and reports. Furthermore, research suggests that the quality of governance disclosure may play a more important role than the internal governance mechanisms in constraining managerial opportunism (Katmon and Farooque, 2017). The findings of this paper provide further support for the role of disclosure in effectively decreasing information asymmetry between managers and investors. Once managers commit to systematically disclosing the governance mechanisms of the firm, their subsequent corporate actions are perceived more positively by the investors.

Our findings also have important implications for governance policy. In weak institutional regimes, corporate governance reforms show insufficient progress and the enforcement of governance standards is difficult (Ararat and Uğur, 2003), which increases the importance of voluntary practices in weak environments (Claessens and Yurtoglu, 2013). Our findings suggest that policy makers can encourage adoption of higher governance standards by introducing the possibility of systematic external evaluation. Such credible assessments overcome the suspicion around voluntary disclosures and have positive shareholder value creation effects for firms.

This study complements existing research on the relationship between corporate governance and firm value. Existing studies have shown that improved governance has a positive impact on firm value in the US (e.g. Huang and Tompkins, 2010; Kim and Purnanandam, 2014; Ferreira and Laux, 2016), in China (Chen, 2015), in Turkey (Ararat, Black, and Yurtoglu, 2017) as well as in the larger context of emerging markets (Durnev and Kim, 2005; Morey et al., 2009). In our sample, the rated firms do not experience significantly positive abnormal returns at the time of their governance rating disclosures. However, we find positive relationship between governance rating disclosures and subsequent SEO and acquisition announcement returns. This is in line with research which suggests that better governance results in higher value creation in SEOs in the US (Huang and Tompkins, 2010; Kim and Purnanandam, 2014; Ferreira and Laux, 2016) and in China (Chen, 2015) and higher value creation in acquisitions for companies trading in US (Masulis, Wang, and Xie, 2007) and in India (Rani, Yadav, and Jain, 2013). Our results suggest that voluntary disclosure of governance ratings provides an added benefit as a channel of indirect shareholder value creation which materializes in the subsequent corporate actions. As such, our findings put forward an indirect, longer-term effect of good governance practices on firm value.

In our empirical setting, governance ratings are publicly available only for a small subset of public firms which voluntarily disclose them. In developed countries, on the other hand,

governance ratings are available for a vast majority of public firms regardless of their disclosure choice. For instance, ISS and GMI, the two leading governance rating agencies, assign governance ratings to the largest 3,000 and 1,000 US public companies, respectively, without requiring subscription to their rating services. Therefore, our findings are more relevant in the context of developing countries, such as China and Peru, where governance ratings are not public information but disclosed on a voluntary basis.

The importance of corporate governance has been growing over time, and the quality of corporate governance practices is now considered to be as important as the financial performance of companies. In this paper, we showed that disclosure of governance quality is negatively linked with managerial opportunism and creates shareholder value. With the rising interest in socially-responsible investment methods, firms have also started to provide voluntary information on their environmental and social impact. New methods are emerging on making such information publicly available through systematic ratings. Further research can extend our analysis to these newly available ratings to investigate how they are related with important aspects of firm strategy such as acquisitions to understand whether these ratings provide useful information about the strategic directions the firms take.

REFERENCES

Aboody, D., & Kasznik, R. 2000. CEO Stock Option Awards and the Timing of Corporate Voluntary Disclosures. ***Journal of Accounting & Economics***, 29(1): 73-100.

Aksu, M., & Kosedag, A. 2006. Transparency and Disclosure Scores and Their Determinants in the Istanbul Stock Exchange. ***Corporate Governance: An International Review***, 14(4): 277-296.

Amihud, Y. 2002. Illiqudity and Stock Returns: Cross-Section and Time-Series Effets. ***Journal of Financial Markets***, 5: 31-56.

Ararat, M., & Uğur, M. 2003. Corporate governance in Turkey: an overview and some policy recommendations. ***Corporate Governance: The International Journal of Business in Society***, 3(1): 58-75.

Ararat, M., Black, B.S., & Yurtoglu, B.B. 2017. The effect of corporate governance on firm value and profitability: Time-series evidence from Turkey. ***Emerging Markets Review***, 30: 113-132.

Aybar, B., & Ficici, A. 2009. Cross-Border Acquisitions and Firm Value: An Analysis of Emerging-Market Multinationals. ***Journal of International Business Studies***, 40(8): 1317-1338.

Balakrishnan, K., Billings, M. B., Kelly, B., & Ljungqvist, A. 2014. Shaping Liquidity: On the Causal Effects of Voluntary Disclosure. ***Journal of Finance***, 69(5): 2237-2278.

Barako, D. G., Hancock, P., & Izan, H. Y. 2006. Factors Influencing Voluntary Corporate Disclosure by Kenyan Companies. ***Corporate Governance: An International Review***, 14(2): 107-125.

Bauwhede, H. V., & Willekens, M. 2008. Disclosure on Corporate Governance in the European Union. ***Corporate Governance: An International Review***, 16(2): 101-115.

Bhat, G., Hope, O. K., & Kang, T. 2006. Does corporate governance transparency affect the accuracy of analyst forecasts? ***Accounting and Finance***, 46, 715–732.

Beyer, A., Cohen, D. A., Lys, T. Z., & Walther, B. R. 2010. The Financial Reporting Environment: Review of the Recent Literature. ***Journal of Accounting & Economics***, 50(2/3): 296-343.

Botosan, C. A. 1997. Disclosure Level and the Cost of Equity Capital. ***Accounting Review***, 72(3): 323.

Botosan, C. A., & Plumlee, M. A. 2002. A Re-Examination of Disclosure Level and the Expected Cost of Equity Capital. ***Journal of Accounting Research***, 40(1): 21-40.

Brennan, M. J., & Subrahmanyam, A. 1996. Market Microstructure and Asset Pricing: On the Compensation for Illiquidity in Stock Returns. ***Journal of Financial Economics***, 41(3): 441-464.

Brown, S. J., & Warner, J. B. 1985. Using daily stock returns: The case of event studies. ***Journal of Financial Economics,*** 14: 3-32.

Capron, L., & Guillén, M. 2009. National Corporate Governance Institutions and Post-Acquisition Target Reorganization. ***Strategic Management Journal***, 30(8): 803-833.

Chen, X. 2015. Improved corporate governance and Chinese seasoned equity offering announcement effects. ***Accounting and Finance***, 1-28.

Cheng, Q., & Lo, K. I. N. 2006. Insider Trading and Voluntary Disclosures. ***Journal of Accounting Research***, 44(5): 815-848.

Claessens, S. & Yurtoglu, B.B. 2013. Corporate governance in emerging markets: A survey. ***Emerging Markets Review***, 15: 1-33.

Coller, M., & Yohn, T. L. 1997. Management Forecasts and Information Asymmetry: An Examination of Bid-Ask Spreads. ***Journal of Accounting Research***, 35(2): 181-191.

Collett, P., & Hrasky, S. 2005. Voluntary Disclosure of Corporate Governance Practices by Listed Australian Companies. ***Corporate Governance: An International Review***, 13(2): 188-196.

Diamond, D. W., & Verrecchia, R. E. 1991. Disclosure, Liquidity, and the Cost of Capital. ***Journal of Finance***, 46(4): 1325-1359.

Dimson, E., Karakaş, O. & Li, X., 2015. Active Ownership. ***Review of Financial Studies***, 28(12): 3225-3268.

Durnev, A., & Kim, E.H. 2005. To Steal or Not to Steal: Firm Attributes, Legal Environment, and Valuation. ***Journal of Finance***, 60(3): 1461-1493.

Elshandidy, T., & Neri, L. 2015. Corporate Governance, Risk Disclosure Practices, and Market Liquidity: Comparative Evidence from the UK and Italy. ***Corporate Governance: An International Review***, 23(4): 331-356.

Ferreira, M., & Laux, P. 2016. Corporate Boards and SEOs: The Effect of Certification and Monitoring. ***Journal of Financial and Quantitative Analysis***, 51: 899-927.

Francis, J. R., Khurana, I. K., & Pereira, R. 2005. Disclosure Incentives and Effects on Cost of Capital around the World. ***Accounting Review***, 80(4): 1125-1162.

Feito-Ruiz, I., & Renneboog, L. 2017. Takeovers and (excess) CEO compensation. ***Journal of International Financial Markets, Institutions and Money***, 50: 156-181.

Frost, C. A. 1997. Disclosure Policy Choices of UK Firms Receiving Modified Audit Reports. ***Journal of Accounting & Economics***, 23(2): 163-187.

Grimminger, A.D., & Di Benedetta, P. 2013. Raising the Bar on Corporate Governance : A Study of Eight Stock Exchange Indices. World Bank and International Finance Corporation.

Grinstein, Y., & Hribar, P. 2004. CEO Compensation and Incentives: Evidence from M&A Bonuses. ***Journal of Financial Economics***, 73(1): 119-143.

Gubbi, S. R., Aulakh, P. S., Ray, S., Sarkar, M. B., & Chittoor, R. 2010. Do International Acquisitions by Emerging-Economy Firms Create Shareholder Value? The Case of Indian Firms. ***Journal of International Business Studies***, 41(3): 397-418.

Haleblian, J., & Finkelstein, S. 1993. Top Management Team Size, CEO Dominance, and Firm Performance: The Moderating Roles of Environmental Turbulence and Discretion. ***Academy of Management Journal***, 36(4): 844-863.

Harford, J., & Li, K. A. I. 2007. Decoupling CEO Wealth and Firm Performance: The Case of Acquiring CEOs. ***Journal of Finance***, 62(2): 917-949.

Harp, N., Myring, M., & Shortridge, R. 2014. Do Variations in the Strength of Corporate Governance Still Matter? A Comparison of the Pre- and Post-Regulation Environment. ***Journal of Business Ethics***, 122(3): 361-373.

Healy, P. M., Hutton, A. P., & Palepu, K. G. 1999. Stock Performance and Intermediation Changes Surrounding Sustained Increases in Disclosure. ***Contemporary Accounting Research***, 16(3): 485-520.

Healy, P. M., & Palepu, K. G. 2001. Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature. ***Journal of Accounting & Economics***, 31(1-3): 405-440.

Heckman, J. J. 1979. Sample Selection Bias as a Specification Error. ***Econometrica***, 47: 153-161.

Houston, J. F., Lev, B., & Tucker, J. W. 2010. To Guide or Not to Guide? Causes and Consequences of Stopping Quarterly Earnings Guidance. ***Contemporary Accounting Research***, 27(1): 143-185.

Hovakimian, A., Opler, T., & Titman, S. 2001. The Debt-Equity Choice. ***Journal of Financial & Quantitative Analysis***, 36(1): 1-24.

Huang, R., & Tompkins, J.G. 2010. Corporate governance and investor reactions to seasoned equity offerings. ***Managerial Finance***, 36: 603-628.

Iatridis, G. E., 2018. Accounting Discretion and Executive Cash Compensation; An Empirical Investigation of Corporate Governance, Credit Ratings and Firm Value. ***Journal of International Financial Markets, Institutions and Money***, forthcoming.

Jo, H., & Kim, Y. 2007. Disclosure Frequency and Earnings Management. ***Journal of Financial Economics***, 84(2): 561-590.

Katmon, N. & Farooque O. 2017. Exploring the Impact of Internal Corporate Governance on the Relation Between Disclosure Quality and Earnings Management in the UK Listed Companies. ***Journal of Business Ethics,*** 142(2):345-367.

Kim, E.H., & Purnanandam, A. 2014. Seasoned Equity Offerings, Corporate Governance, and Investments. ***Review of Finance***, 18: 1023-1057.

Laidroo, L. 2009. Association between Ownership Structure and Public Announcements' Disclosures. ***Corporate Governance: An International Review***, 17(1): 13-34.

Lang, M., & Lundholm, R. 1993. Cross-Sectional Determinants of Analyst Ratings of Corporate Disclosures. ***Journal of Accounting Research***, 31(2): 246-271.

Lang, M. H., & Lundholm, R. J. 2000. Voluntary Disclosure and Equity Offerings: Reducing Information Asymmetry or Hyping the Stock? ***Contemporary Accounting Research***, 17(4): 623-662.

Loughran, T., & Ritter, J. R. 1995. The New Issues Puzzle. ***Journal of Finance***, 50(1): 23-51.

MacKinlay, A. C. 1997. Event Studies in Economics and Finance. ***Journal of Economic Literature***, 35: 13-39.

Masulis, R.W., Wang, C., & Xie, F. 2007. Corporate Governance and Acquirer Returns. ***Journal of Finance***, 62: 1851-1889.

Mercer, M. 2004. How do investors assess the credibility of management disclosures? ***Accounting Horizons***, 18(3), 185–196.

Morey, M., Gottesman, A., Baker, E., & Godridge, B. 2009. Does better corporate governance result in higher valuations in emerging markets? Another examination using a new data set. ***Journal of Banking and Finance***, 33: 254-262.

Myers, S. C., & Majluf, N. S. 1984. Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have. ***Journal of Financial Economics***, 13(2): 187-221.

Netter, J., Stegemoller, M., & Wintoki, M. B. 2011. Implications of Data Screens on Merger and Acquisition Analysis: A Large Sample Study of Mergers and Acquisitions from 1992 to 2009. ***Review of Financial Studies***, 24(7): 2316-2357.

Ozkan, N. 2012. Do CEOs Gain More in Foreign Acquisitions Than Domestic Acquisitions? ***Journal of Banking & Finance***, 36(4): 1122-1138.

Pagano, M., Panetta, F., & Zingales, L. 1998. Why Do Companies Go Public? An Empirical Analysis. ***Journal of Finance***, 53(1): 27-64.

Rani, N., Yadav, S.S., & Jain, P.K. 2013. Impact of Corporate Governance Score on Abnormal Returns of Mergers and Acquisitions. ***Procedia Economics and Finance***, 5: 637-646.

Robertson, C., Blevins, D, Duffy, T. 2013. A Five-Year Review, Update, and Assessment of Ethics and Governance in Strategic Management Journal. ***Journal of Business Ethics***, 117(1): 85-91.

Shroff, N., Sun, A. X., White, H. D., & Zhang, W. 2013. Voluntary Disclosure and Information Asymmetry: Evidence from the 2005 Securities Offering Reform. ***Journal of Accounting Research***, 51(5): 1299-1345.

Spiess, D. K., & Affleck-Graves, J. 1995. Underperformance in Long-Run Stock Returns Following Seasoned Equity Offerings. ***Journal of Financial Economics***, 38(3): 243-267.

Zaheer, A., Castañer, X., & Souder, D. 2013. Synergy Sources, Target Autonomy, and Integration in Acquisitions. ***Journal of Management***, 39(3): 604-632.

TABLE 1

Descriptive Statistics for Governance Rating Disclosures

This table shows the yearly distribution of all public firms listed on BIST, the subsample of firms with disclosed corporate governance ratings, and the average governance scores for each year.

Year	Number of Listed Firms	Number of First-Time Rating Disclosures	Cumulative Number of Rating Disclosures	Percentage of Rated Firms	Average First-Time Rating Score	Average Rating Score
2007	339	6	6	1.77	77.40	77.40
2008	335	5	11	3.28	77.38	79.65
2009	328	12	23	7.01	81.15	81.51
2010	347	7	30	8.65	79.48	82.89
2011	373	6	36	9.65	83.30	84.33
2012	416	7	43	10.34	84.67	86.91
2013	428	5	48	11.21	86.25	89.71
2014	439	7	55	12.53	87.09	88.24
2015	429	3	58	13.52	86.63	90.93

TABLE 2

Summary Statistics for Firm Financials

This table presents summary statistics of financial information for firms listed on BIST. Rated firms are firms with disclosed corporate governance scores, and unrated firms are firms without governance scores. Matched firms are unrated firms that are matched to rated firms in the same industry, based on their propensity to disclose governance ratings depending on their average age, size, and return on assets over the sample period. Currencies are given in Turkish Liras (million TRY). The *t*-statistics for comparison of firm financials between rated and unrated firms are also provided. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Rated Firms			Unrated Firms			Difference	Matched (Unrated) Firms		
Variable	No. of Firm-Years	Mean	Std. Dev.	No. of Firm-Years	Mean	Std. Dev.	*t*-statistic	No. of Firm-Years	Mean	Std. Dev.
Firm Founding Age	342	30.86	15.63	2,238	28.25	15.47	2.90***	487	26.46	15.36
Firm Public Age	342	14.83	7.31	2,238	12.50	7.88	5.15***	487	13.48	7.21
Total Assets	342	3,410	4,644	2,238	1,418	10,391	3.49***	487	4,828	21,885
Market Capitalization	342	2,534	4,452	2,238	565.6	2,259	12.77***	487	1,549	4,584
Return on Assets (%)	342	5.54	9.12	2,238	1.31	22.90	3.37***	487	4.43	31.31
Tobin's Q	342	1.22	0.66	2,238	1.42	1.33	-2.75***	487	1.33	1.22
Firm Growth	337	0.56	5.46	2,166	0.62	9.60	-0.13	465	1.18	13.05
Leverage	342	1.45	1.85	2,238	-0.55	79.50	0.47	487	1.33	3.62

TABLE 3

Governance Rating Disclosures and Subsequent SEO and Acquisition Activities

This table presents estimates of logit models for the likelihood of undertaking SEOs (acquisitions), where the dependent variable takes the value of one in year *t* for a given firm if the firm undertakes at least one SEO (acquisition) in years *t+1* or *t+2*, and zero otherwise. The models include a constant term, firm and industry fixed effects (as indicated) that are not reported. Industry dummies are assigned according to the two-digit NAICS codes. For each independent variable, the first row reports its estimated coefficient, and the second row the corresponding standard error. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Likelihood of SEO				Likelihood of Acquisitions			
	Fixed Effect		Random Effect		Fixed Effect		Random Effect	
	Full Sample (1)	Matched Sample (2)	Full Sample (3)	Matched Sample (4)	Full Sample (5)	Matched Sample (6)	Full Sample (7)	Matched Sample (8)
Governance Rating Indicator	-1.491***	-1.503***	-0.914**	-1.072**	-0.942**	-0.964**	-0.516*	-0.554*
	(0.533)	(0.547)	(0.453)	(0.466)	(0.370)	(0.383)	(0.309)	(0.330)
Firm Size	-0.414***	-0.380**	-0.310***	-0.173	-0.129	-0.135	0.267***	0.308***
	(0.120)	(0.192)	(0.074)	(0.113)	(0.114)	(0.190)	(0.062)	(0.103)
Tobin's Q	0.036	0.357	0.064	0.239	0.008	-0.058	0.035	-0.076
	(0.067)	(0.292)	(0.060)	(0.180)	(0.072)	(0.294)	(0.062)	(0.193)
Firm Age	-0.018	-0.308	-0.091	-0.418	0.828**	1.090	-0.405***	-0.251
	(0.327)	(0.510)	(0.177)	(0.315)	(0.367)	(0.695)	(0.155)	(0.306)
Return on Assets	-0.000	0.012	-0.002	0.006	-0.002	-0.000	-0.003	-0.006
	(0.002)	(0.008)	(0.003)	(0.005)	(0.004)	(0.010)	(0.004)	(0.008)
Leverage	-0.002	0.097	0.000	0.075*	-0.002	-0.024	0.000	-0.059
	(0.006)	(0.068)	(0.001)	(0.045)	(0.006)	(0.080)	(0.001)	(0.065)

Free Cash Flow	0.016	0.026	0.028	0.041	0.035	0.030	0.049	0.037
	(0.105)	(0.106)	(0.107)	(0.101)	(0.047)	(0.046)	(0.051)	(0.051)
Firm Fixed Effects	Yes	Yes			Yes	Yes		
Industry Fixed Effects			Yes	Yes			Yes	Yes
No of Obs.	1,005	343	2,606	835	1,208	441	2,606	835
No of Firms	143	46	412	112	180	58	412	112
Log Likelihood	-428.30	-139.87	-931.23	-292.29	-517.30	-190.49	-1095.42	-373.80

TABLE 4

Governance Rating Disclosures and Subsequent SEO and Acquisition Activities within One Year

This table presents estimates of fixed-effects logit models for the likelihood of undertaking SEOs (acquisitions), where the dependent variable takes the value of one in year *t* for a given firm if the firm undertakes at least one SEO (acquisition) in year *t+1*, and zero otherwise. The models include a constant term and firm fixed effects that are not reported. For each independent variable, the first row reports its estimated coefficient, and the second row the corresponding standard error. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Likelihood of SEO		Likelihood of Acquisitions	
	Full Sample	Matched Sample	Full Sample	Matched Sample
	(1)	(2)	(3)	(4)
Governance Rating Indicator	-1.461**	-1.441**	-0.645*	-0.665*
	(0.573)	(0.586)	(0.374)	(0.388)
Firm Size	-0.268**	-0.195	0.078	0.135
	(0.131)	(0.214)	(0.117)	(0.182)
Tobin's Q	0.006	0.387	0.030	0.103
	(0.065)	(0.308)	(0.077)	(0.287)
Firm Age	0.715*	0.208	0.959**	0.808
	(0.392)	(0.588)	(0.410)	(0.726)
Return on Assets	-0.212	0.014	-0.002	-0.174
	(0.287)	(0.317)	(0.385)	(1.197)
Leverage	-0.007	0.060	-0.008	0.004
	(0.006)	(0.050)	(0.007)	(0.082)
Free Cash Flow	-0.004	0.064	0.019	0.012
	(0.124)	(0.130)	(0.045)	(0.045)
Firm Fixed Effects	Yes	Yes	Yes	Yes
No of Obs.	998	343	1251	461
No of Firms	144	46	193	62
Log Likelihood	-345.99	-109.89	-453.49	-175.50

TABLE 5

Cumulative Abnormal Returns around Corporate Events

This table presents the cumulative abnormal returns (CARs) around the announcement dates of governance rating disclosures, seasoned equity offerings (SEOs) and acquisitions conducted by our sample firms. Abnormal returns are calculated using the standard event study methodology of Brown and Warner (1985). CARs of the firms are calculated for the 11-day event window [-5,+5] around the event announcement day, where day 0 corresponds to the announcement day. The parameters of the market model, which uses the return on BIST 100 Index as the market return, are estimated over the interval from 250 to 50 days prior to the announcement day. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

CAR [-5,5]	Obs.	Mean	Std. Dev.	*t*-statistic
Initial Governance Rating Disclosures	58	0.0064	0.0778	0.63
Subsequent Governance Rating Disclosures	292	0.0021	0.0874	0.41
SEO Filing Announcements – All Firms	158	-0.0988	0.2910	-4.27***
SEO Filing Announcements by Rated Firms	8	-0.0604	0.1272	-1.34
SEO Filing Announcements by Unrated Firms	150	-0.1008	0.2973	-4.15***
Acquisition Announcements – All Firms	313	0.0075	0.1865	0.71
Acquisition Announcements by Rated Firms	42	0.0349	0.1095	2.07**
Acquisition Announcements by Unrated Firms	271	0.0032	0.1956	0.27

TABLE 6

Governance Rating Disclosures and Abnormal Returns around SEO and Acquisition Announcements

This table presents the regression estimates for the determinants of the cumulative abnormal returns (CARs) of the sample firms around the announcement dates of seasoned equity offerings (SEOs) and acquisitions. The dependent variable is the sample firm's CAR over the given time window around the announcement day. Abnormal returns are calculated using the standard event study methodology of Brown and Warner (1985) for different event windows around the event announcement date, where day 0 corresponds to the announcement day. The parameters of the market model, which uses the return on BIST 100 Index as the market return, are estimated over the interval from 250 to 50 days prior to the announcement date. All financial variables are lagged one year before the SEO or acquisition event. The models also include a constant term, and year and industry fixed effects that are not reported. Industry dummies are assigned according to the two-digit NAICS codes. For each independent variable, the first row reports its estimated coefficient, and the second row the corresponding standard error. All standard errors are heteroscedasticity-robust. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Seasoned Equity Offerings			Acquisitions		
	(1)	(2)	(3)	(4)	(5)	(6)
	CAR	CAR	CAR	CAR	CAR	CAR
	[-5,5]	[-3,5]	[-3,3]	[-5,5]	[-3,5]	[-3,3]
Governance Rating Indicator	0.132**	0.126*	0.109*	0.100**	0.112**	0.013
	(0.067)	(0.066)	(0.064)	(0.042)	(0.045)	(0.013)
Relative Offer Price	-0.048	-0.049	-0.036			
	(0.046)	(0.043)	(0.038)			
Relative Deal Size	0.015	0.006	-0.013			
	(0.141)	(0.135)	(0.123)			
Specific Use of Funds	0.185**	0.183**	0.198***			
	(0.077)	(0.075)	(0.061)			
Number of SEOs in last 3 years	0.042	0.049	0.046			
	(0.032)	(0.031)	(0.028)			
Cash Only				0.003	-0.005	-0.015
				(0.021)	(0.021)	(0.011)
Full Acquisition				-0.021	-0.013	0.005
				(0.017)	(0.018)	(0.010)
Public Target				-0.001	0.001	-0.007
				(0.022)	(0.021)	(0.015)
Foreign Target				0.102**	0.095**	0.053*
				(0.041)	(0.041)	(0.030)
Diversifying Acquisition				0.064**	0.070**	-0.012
				(0.031)	(0.033)	(0.011)
Number of Acquisitions in last 3 years				-0.010*	-0.009	-0.000
				(0.006)	(0.006)	(0.003)
Firm Size	-0.007	-0.012	-0.009	-0.021***	-0.022***	-0.009**
	(0.016)	(0.016)	(0.013)	(0.007)	(0.007)	(0.004)
Tobin's Q	-0.054*	-0.049*	-0.045**	-0.005	-0.008	-0.002
	(0.027)	(0.026)	(0.022)	(0.010)	(0.009)	(0.007)

Return on Assets	-0.156	-0.142	-0.153	0.032*	0.030*	0.009
	(0.156)	(0.145)	(0.134)	(0.019)	(0.018)	(0.014)
Firm Growth	0.0002	-0.0003	-0.0002	0.0001	0.0002	-0.0002***
	(0.0006)	(0.0006)	(0.0005)	(0.0001)	(0.0001)	(0.0001)
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
No of Obs.	158	158	158	313	313	313
Adjusted R^2	0.038	0.062	0.100	0.225	0.228	0.036

TABLE 7

Heckman's Two-Step Procedure for Governance Rating Disclosures and Abnormal Returns around Acquisition Announcements

This table presents the estimates of Heckman's two-step procedure for the determinants of the cumulative abnormal returns (CARs) of the sample firms around the announcement dates of acquisitions. The dependent variable in the main model is the sample firm's CAR over the given time window around the announcement day. Abnormal returns are calculated using the standard event study methodology of Brown and Warner (1985) for different event windows around the event announcement date, where day 0 corresponds to the announcement day. The parameters of the market model, which uses the return on BIST 100 Index as the market return, are estimated over the interval from 250 to 50 days prior to the announcement date. The selection model is a probit model which estimates the likelihood of firms undertaking at least one acquisition during the sample period 2007-2015 based on governance rating disclosure, the number of prior acquisitions and firm financials such as assets, Tobin's Q, return on assets, leverage, free cash flow, and firm age. All explanatory variables are lagged one year before the acquisition event. The models also include a constant term, and year and industry fixed effects that are not reported. Industry dummies are assigned according to the two-digit NAICS codes. For each independent variable, the first row reports its estimated coefficient, and the second row the corresponding standard error. All standard errors are heteroscedasticity-robust. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Acquisitions		
	(1)	(2)	(3)
	CAR	CAR	CAR
	[-5,5]	[-3,5]	[-3,3]
Governance Rating Indicator	0.087**	0.096***	0.009
	(0.035)	(0.036)	(0.016)
Cash Only	-0.000	-0.009	-0.016
	(0.021)	(0.022)	(0.010)
Full Acquisition	-0.017	-0.010	0.006
	(0.021)	(0.022)	(0.010)
Public Target	-0.003	-0.001	-0.006
	(0.029)	(0.030)	(0.014)
Foreign Target	0.096**	0.091*	0.049**
	(0.046)	(0.048)	(0.022)
Diversifying Acquisition	0.075***	0.082***	-0.013
	(0.026)	(0.027)	(0.012)
Number of Acquisitions in last 3 years	-0.012*	-0.010	-0.001
	(0.007)	(0.007)	(0.003)
Firm Size	-0.013*	-0.013*	-0.010***
	(0.007)	(0.007)	(0.003)
Tobin's Q	-0.006	-0.008	-0.001
	(0.011)	(0.012)	(0.005)
Return on Assets	0.021	0.020	0.008
	(0.039)	(0.041)	(0.018)
Firm Growth	0.0001	0.0001	-0.0001
	(0.0003)	(0.0003)	(0.0002)
Industry Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes

Lambda	0.120**	0.124**	-0.012
	(0.047)	(0.049)	(0.021)
No of Obs.	2,549	2,549	2,549
Rho	0.634	0.629	-0.164

Appendix A: Corporate Governance Practices in Turkey

To better integrate the Turkish financial market into the global financial system, the Capital Markets Board (CMB) of Turkey established the "Corporate Governance Principles" (CGP) in 2003.[4] The CMB requires publicly listed companies to file a Corporate Governance Compliance Report (CGCR) as an integral part of their annual reports and disclose their compliance status with these principles. The implementation of most of these principles is optional, and a "comply or explain" approach is taken, indicating that if firms do not comply with some specific principles, they simply should explain the reasons why they do not comply.

In addition, CMB of Turkey started to implement a corporate governance rating framework in 2007. Accordingly, firms can voluntarily enlist a governance rating agency authorized by the CMB which will assess the company's compliance with CGP. Upon request by the firm, the rating agency conducts an analysis of the firm's governance. There are three rating agencies licensed by the CMB that are actively rating firms on BIST according to their corporate governance practices.[5] Each rating institution has its own rating methodology within parameters set by the CMB. The evaluation process of the accredited rating agencies is based on publicly available information, on additional information provided by companies upon agency's request, and also on agency's proprietary research including interviews with company executives and the board members.[6] Therefore, the corporate governance rating score enlarges the capital market's existing information

[4] The CGP of Turkey is primarily based on the "OECD Principles of Corporate Governance" and modified according to the particular conditions of the country.

[5] These rating agencies, authorized by CMB in the scope of the Communiqué of CMB on "Principles Governing Rating Activities in the Capital Market and Rating Institutions", are: Saha Kurumsal Yönetim ve Kredi Derecelendirme Hizmetleri A.Ş., Kobirate Uluslararası Kredi Derecelendirme ve Kurumsal Yönetim Hizmetleri A.Ş., JCR Avrasya Derecelendirme A.Ş.

[6] See "Raising the Bar on Corporate Governance: A Study of Eight Stock Exchange Indices" by Grimminger and Di Benedetta (2013).

set and helps investors make more informed decisions using the details provided by rating agencies on the corporate governance practices of the rated firms.

While enlisting a rating agency is voluntary, firms cannot withhold their governance rating; i.e. ratings are made publicly available once the assessment procedure is complete. If the rated firm is a publicly traded firm on BIST, then the rating agency is obliged to disclose the governance rating score to the general public via the Public Disclosure Platform (PDP), and also inform BIST and CMB formally about the rating score.[7] The corporate governance rating scores are available to the public in the company disclosures sent to PDP, and the full analysis reports prepared by the rating agencies are available on the companies' websites as well as on the website of Corporate Governance Association of Turkey. Therefore, while it is the voluntary decision of the firm whether to be rated or not, the disclosure of the governance rating is not under the discretion of the firm. This removes the concern that only firms with high governance scores disclose their scores.

The CGP are classified into four main categories. These categories and their corresponding weights in the overall corporate governance score calculation are: Shareholders (25%), Public Disclosure & Transparency (25%), Stakeholders (15%), Board of Directors (35%). Firms with an overall governance score of at least 70 out of a maximum of 100 and a score of at least 65 for each main category are included in the BIST Corporate Governance Index (CGI), which started to be published by BIST on August 31, 2007. BIST CGI aims to measure the price and return performances of firms traded on BIST that have good corporate governance practices.

[7] The CGP mainly address public firms; however, private firms can also implement these principles. Therefore, not only listed (public) firms but also unlisted (private) companies can be rated. If the rated firm is a private firm, then the rating agency will not disclose the governance rating score to the general public if the rated firm prefers so. In this case, only the CMB will be formally informed about the rating score.

Appendix B: Variable Definitions

Variable	Description
Governance Rating Indicator	Indicator variable taking the value of one if the sample firm has disclosed its governance rating and zero otherwise.
Firm Founding Age	Number of years since the firm's incorporation.
Firm Public Age	Number of years since the firm's IPO.
Firm Age	Natural logarithm of the number of years since the firm's incorporation.
Firm Size	Natural logarithm of total assets.
Tobin's Q	Ratio of market value of assets to book value of assets.
Firm Growth	Change in firm's sales divided by previous year's sales.
Return on Assets	Ratio of operating income before depreciation to total assets.
Leverage	Long-term debt plus short-term debt divided by total assets.
Free Cash Flow	Free cash flow of the firm.
SEO-related variables:	
Relative Offer Price	Ratio of the SEO price to the offering firm's stock price 1 day before the offering.
Relative Deal Size	Ratio of the SEO volume to the market capitalization of the sample firm.
Specific Use of Funds	Indicator variable taking the value of one if a specific purpose for the SEO is indicated such as project finance, capital expenditures, or debt refinancing; and zero if the purpose of the SEO is stated as "General Corporate Purposes".
Number of SEOs in last 3 years	Number of SEOs conducted by the sample firm in the three years before the focal SEO event.
Acquisition-related variables:	
Cash Only	Indicator variable taking the value of one if the acquisition is financed 100% by cash and zero otherwise.
Full Acquisition	Indicator variable taking the value of one if the target firm is fully owned by the acquirer after the deal and zero otherwise.
Public Target	Indicator variable taking the value of one if the target firm is public and zero otherwise.
Foreign Target	Indicator variable taking the value of one if the target firm is foreign and zero otherwise.
Diversifying Acquisition	Indicator variable taking the value of one if the acquirer and the target firm are not in the same industry according to their four-digit SIC codes and zero otherwise.
Number of Acquisitions in last 3 years	Number of acquisitions by the sample firm in the three years preceding the focal acquisition.