Corporate Social Responsibility and the Long-Term Performance of Mergers and Acquisitions: Do Regions and Related-Party Transactions Matter?

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Abstract: This study investigates the effects of geographical regions and related-party transactions on corporate social responsibility (CSR) and long-term mergers and acquisitions (M&A) performance linkage. We conduct a Heckman two-stage model analysis, using data from listed firms in the Shanghai and Shenzhen stock exchange markets in China. The results indicate that: (1) buyers’ CSR performance has a significant and positive effect on long-term M&A performance. (2) Significant differences exist across geographical regions in the links between CSR and long-term M&A performance. In our study, the effects of CSR on long-term M&A performance were positive and significant in a sub-sample of firms located in the eastern region, but the effects were negative and insignificant in a sub-sample of firms located in regions other than in the east. (3) Related-party M&A transactions experience more positive and significant CSR long-term M&A performance linkage, compared to non-related party M&A transactions. Our findings might provide more robust evidence to CSR performance linkage, as we have examined the linkage in a special context of M&A activities, using a Heckman two-stage model to alleviate endogeneity bias. We also bring further insights into the effects of two contingent factors (geographical regions and related-party transactions) on the CSR-performance linkage. The findings of this article suggest that it is reasonable for firms to act socially responsibly when generating economic benefits. Policy makers should consider how to encourage firms to better fulfill CSR through improving the market environment and by enhancing their levels of supervision.

Keywords: corporate social responsibility; mergers and acquisitions; long-term performance; regions; related-party transactions

1. Introduction

Firms that fulfill corporate social responsibility (CSR) have a positive external effect, and they could have a profound, positive impact on the sustainable development of society as a whole. As most firms are not non-profit organizations, they are more concerned about the economic consequences of bearing CSR, which in turn would determine the long-term sustainability of individual firms. Thus, the issue of the economic consequences of fulfilling CSR is a key in both CSR research and in practice. However, related studies have drawn different conclusions about this exact issue. Griffin and Mahon (1997) analyzed 50 articles that studied issues related to “CSR and firm performance” between 1972 and 1994. The study found most of the articles concluded that there is a positive relationship between CSR
and firm performance, but some of the articles concluded that there is a negative, non-related or other type of relationship [1]. Based on a meta-analysis of 52 related academic articles, Orlitzky et al. (2003) [2] concluded that there is a two-way effect between CSR and corporate financial performance. According to this study, the endogeneity of two variables and the consequent estimation bias might be an important reason for the divergent conclusions of existing studies. Therefore, examining the linkage in a specific context or using different performance measures may correct the endogeneity introduced by the two variables. Deng et al. (2013) [3] conducted a study regarding the CSR-performance relationship through the perspective of mergers and acquisitions (M&A) activities. Deng noted that M&A performance is not equal to firm performance but is also influenced by CSR, because the M&A activities could not succeed without the active involvement of stakeholders. The study’s statistical analysis (based on American-listed firms) indicates that acquirers with a higher level of CSR performance complete deals more rapidly and enjoy a higher possibility of success [3].

China covers a vast territory, and there are notable differences in the economic development, market environment, governance environment, and transaction costs in China’s different regions [4,5]. These differences might influence firms’ acquiring synergy from M&A activities. Evidence exists which indicates that regional differences might matter in CSR and CSR’s economic consequences. For example, studies found that firms in remote areas, those that are subject to less scrutiny from shareholders, are more likely to hold cash rather than distribute it to their shareholders [6]. Firms in more competitive environments own higher CSR ratings [7], and corporate governance and monitoring mechanisms have an impact on CSR and its economic consequences [8]. Furthermore, there are a considerable amount of related-party M&A activities in China’s stock markets. Some studies indicate that related-party transactions are double-edged. On the one hand, controlling shareholders may hollow out resources through related-party transactions and damage the firm’s benefits [9,10]. On the other hand, related-party M&A activities that are intermediated by controlling shareholders are more likely to enjoy fewer conflicts and better coordination [11,12]. This reduces the risk of information asymmetry [13], and might consequently lead to more successful integration and stronger synergy.

The goal of this study is to test the CSR-performance linkage in the context of M&A activities and an emerging economy, and to explore the potential effects of geographical regions and related-party transactions on the abovementioned linkage. First, by examining CSR performance in the context of M&A activities and using a variation of EPS as a proxy of long-term M&A performance to measure economic consequence of CSR instead of a direct firm financial performance indicator, this article attempts to alleviate the endogeneity bias caused by two-way effects between CSR and firm performance. Secondly, considering the imbalance in economic development between the different regions of China, and given that there are a considerable number of related-party transactions in M&A activities, our research introduced geographical regions and related-party transactions as two group variables for comparing the differences in the long-term CSR-M&A performance linkages across different regions and transaction types. We thus seek to provide new insights into explaining the relationship between CSR and firm performance.

Our research could make contributions to existing literature in the following issues: First, unlike most related studies that examine the direct relationship between CSR and firm performance, we studied the linkage in the context of M&A activities. We select long-term M&A performance as an outcome variable and use a Heckman two-stage model to reduce endogeneity and sample self-selection bias, which we determined could provide more robust evidence. This special context could also possibly bring new insights into the impact of CSR on firms’ strategic activities. Secondly, we focus on the influence of contingent factors (such as geographical regions and related-party transactions), and we provide evidence regarding the differences in CSR-performance linkages across different regions and examining transactions of different natures. Our findings also indicate that there are more positive effects of related-party transactions on CSR-performance linkage, but we did not observe the negative effects of related-party transactions revealed by many studies. These findings might further enrich the knowledge of CSR and related theories.
2. Literature Review and Hypotheses

2.1. Corporate Social Responsibility and Firm Performance

Originally, CSR was defined as meaning a businessman should make decisions according to the values of society and the public [14]. This means firms should undertake greater responsibility than the obligations that are equal to their rights to operational income [15]. Carroll (1979) [16] differentiates CSR into four dimensions, namely economic, legal, ethical, and philanthropic. He believes that the first three responsibilities should be undertaken by all firms, and the last one voluntarily. Later, Schwartz and Carroll (2003) [17] integrated philanthropic pursuits into the economic and ethical dimensions of responsibilities. Thus, CSR includes economic, legal, and ethical areas, the three of which overlap each other. They suggest that the best strategy for firms is to position their CSR activities into these overlapping areas, or in the overlapping area between the economic and ethical areas.

Whether or not firms should undertake CSR has been widely discussed in literature. For example, some studies suggest that firms should not worry about CSR. These studies claim that the responsibility of a firm is to earn profits for its shareholders, and undertaking CSR will undermine the firm’s value [18] and negatively influence the configuration and availability of the firm’s rare resources [19]. Other studies believe that firms should undertake CSR, as these firms need support from their stakeholders (such as employees, customers, suppliers, the government and society) [20,21]. The results of empirical studies regarding the economic impacts of CSR are also mixed. Some studies have found no significant relationship between CSR and a firm’s economic performance [22,23]. Other studies provide evidence of a significant relationship between CSR and corporate performance [24–27]. Evidence also exists that behaving irresponsibly could damage a firm’s financial performance [28].

However, there are two issues that should be highlighted in CSR research, as empirical results are mixed. First, the economic effects of CSR might depend on contingent factors. Numerous studies have found that there may be many contingent factors. For example, the CSR performance relationship may be moderated by innovation, the differentiation level of firms in the industry [29], organizational cultures [30], etc. In this study, we introduce geographical regions and related-party transactions as two contingent factors, in order to examine the contingent effects of these two factors on the CSR performance linkage.

Secondly, the endogeneity of CSR and performance variables and consequent estimation bias might also cause mixed results [2,3]. A comprehensive meta-analysis suggests two-way effects between CSR and corporate financial performance linkage [2]. Thus, the endogeneity of CSR and corporate performance variables might cause estimation bias and mixed empirical results. Deng et al. (2013) [3] suggest that conducting an empirical analysis in the context of M&A activities, in order to examine CSR performance linkage, might alleviate the above endogeneity bias. This is because M&A involves important strategic decisions that have strong effects on shareholders wealth, and the outcomes are influenced by firm stakeholders. Therefore, our study uses long-term M&A performance as a performance measurement, in order to examine CSR performance linkage and take advantage of alleviating any endogeneity bias.

2.2. CSR and Long-Term M&A Performance

The synergy theory believes that pursuing synergy is a key motivation of M&A activities. If the synergy effect is stronger, the M&A outcome is more favorable [31]. Schweiger (2002) [32] differentiates M&A synergy into several types: income, cost, market power, and intangible assets. The first three types of synergy have been widely discussed in literature. However, many studies have indicated that intangible assets (such as knowledge, experience, and capability) could also add value to M&A activities. For example, Martynova and Renneboog (2008) [33] analyzed 2400 M&A events in approximately 30 European countries (approximately two-thirds of them were international M&A events). The results indicate that the Cumulate Abnormal Return (CAR) becomes higher when buyer governance capability is higher. In addition, those events where target firms have superior governance
capability—but buyers do not—also enjoy higher CAR. The study attributed the former result to the spillover effect of buyer capability, and the latter to the “bootstrap effect”, through which, buyers absorb target firms’ governance knowledge and apply that knowledge to their practices. Wang and Xie (2009) [34] analyzed 400 M&A events that occurred in USA capital markets during the period from 1990 to 2004. The study found that synergy becomes stronger when buyer operational capability is much higher than that of the target firms. This result indicates that the transfer of buyer capability to target firms during the integration process is an important way to realize synergy in M&A activities.

Similar to operational capability and corporate governance capability, a good CSR reputation is also an essential intangible asset for a firm. Aktas et al. (2011) [35] suggested that CSR should be part of a firm’s capability, to help the firm deal with social and environmental crises or other abnormal situations. According to this view, M&A activities may also generate synergy from CSR. On the one hand, buyers may transfer tacit knowledge about how to deal with relationships with stakeholders to target firms, which in turn would form the “spillover” effect. On the other hand, CSR is a multi-dimensional homogenous capability, and a buyer could also acquire that capability from the target firm, which would achieve the “bootstrap” effect. Therefore, if one M&A party performs better or is more experienced in CSR, there is greater learning potential for another party. This is more likely to lead to synergy through CSR learning in M&A activities.

Abundant empirical research exists which indicates that performing CSR could generate economic benefits. Spicer (1978) [36] employed a market and finance index to measure firm performance. The study found that fulfilling CSR is beneficial to improving a firm’s value. Recently, Hategan and Ruxandra Ioana (2017) [37] adopted panel data from Romanian listed companies, from 2011 to 2016. This study found that CSR behaviors such as charitable contributions have a positive influence on corporate performance. Singh et al. (2017) [38] carried out an empirical study using a sample of mainland China and Hong Kong listed firms. This study also found positive relationships between community donations, improved working conditions and corporate performance.

The development of stakeholder and social contract theories is helpful in deeply revealing the impact of CSR on a firm’s economic benefits. Clarkson (1995) [21] maintained that a firm is a complex system consisting of different stakeholders. It is difficult for the firm to survive without stakeholder support. Hence, firms should generate wealth for their stakeholders (such as shareholders, lenders, suppliers, employees and the government). Jensen and Meckling (1976) [39] suggested that a firm is an arrangement of series-explicit and inexplicit contracts between different individuals in society. Fundamentally, the contract between a firm and society is the contract governing the relationships between the firm and its stakeholders. The contract keeps both parties in a situation of fair trading. First, stakeholders should be compensated by the firm, as they input specialized factors into the firm. Secondly, stakeholders should provide resources to the firm, according to their contract arrangements, in order to help keep the firm surviving and developing. Therefore, the extent to which the firm performs and enters into contracts with its stakeholders will ultimately determine the future development of the firm. Wickert et al. (2017) [40] studied cases of multinational corporations acquiring social-oriented enterprises. This study found that multinationals decided the transactions not only accrue financial benefits, but the multinationals also benefit from learning the CSR-related practices of the target firms.

Based on the above analysis, we can conclude that if the buyer performs better in terms of CSR, the M&A will be more likely to realize synergy through CSR spill-over and learning effects. The new firm will be more likely to improve relationships with its stakeholders [41], and improve its competitiveness after the M&A integration process. Hence, we propose that:

Hypothesis 1 (H1). Buyers with better CSR performance enjoy higher long-term M&A performance.
2.3. CSR, Geographical Regions, and Long-Term M&A Performance

China is a vast territory, and different regions undoubtedly have significant differences in their market environments, investor protection policies, and the protection given to stakeholders. This is true even when different territories operate under the same laws and regulation systems. Evidence also exists which confirms the above opinion. For example, the Word Bank investigation in 2006 found that China’s east region enjoys a higher level of market efficiency and softer environment than do the middle and west regions [4]. Wei et al. (2013) [5] also claim that, compared to the middle and western regions of China, the eastern region has a more complete market, with less government intervention and lower transaction costs. Therefore, firms in the eastern region are more likely to realize development through competition, innovation and diversification, which is different than their counterparts in middle and western regions, where having “political connections” is vital.

There is a lack of empirical evidence to support the claim that CSR performance linkage is different across regions. However, many related studies indicate that CSR and its effects on performance might differ across different geographical regions. For example, Kühn et al. (2018) [42] investigated CSR reporting in seven African countries. Kühn found that, unlike companies in Western countries, African companies’ CSR activities mainly focus on philanthropy, and CSR reporting was positively influenced by both GDP and the level of governance standards. Kolk et al. (2015) [43] conducted a survey in China and found that Chinese customers perceive two components (instead of four) in Western CSR constructs. Baughn et al. (2007) [44] conducted a survey in 104 countries and found that CSR is different across countries and regions. Baughn also found that significant relationships exist between CSR and a country’s economic, political, and social contexts.

Empirical research in the Chinese context also indicates that firms in eastern regions are more innovative and they also experience more mobility in terms of human resource talent. These conditions are more favorable to knowledge diffusion and spill-over, as firms operating under these conditions are more likely to face an environment of fair market competition and intellectual property protection [45]. By comparing differences in the knowledge flow between Chinese and USA firms, Li et al. (2014) [46] found that low levels of marketization could become an obstacle to knowledge flow between innovation entities. Therefore, buyer firms in eastern regions are more likely to produce CSR spill-over effects. Consequently, CSR performance improves on both sides and achieves synergy in CSR activities, after the completion of M&A.

Shah and Arjoon (2015) [47] found that firms implement corporate sustainability initiatives due to being driven by intrinsic self-determined motivation or extrinsic circumstances and pressures. Thus, if the society of the region is more CSR-conscious, firms might be more likely to act socially responsible for the sake of and due to strong intrinsic motivation and outside pressures from society. Governments in middle and western regions depend more on administrative intervention, as opposed to system development. Thus, firms in these regions are more likely to obtain “economic rent” through the building of good government-enterprise relationships, instead of or in addition to innovation and market competition. In this situation, firms are less likely to be highly socially responsible, as society is less CSR-conscious. Also, the quality of CSR information might be in doubt, as there is a lack of necessary regulation on information disclosure [48]. On the contrary, firms in eastern regions are more likely to be highly socially responsible and to disclose reliable CSR information to help enhance their market position. This is because these firms are facing an improved market environment, which means that cheating bears a higher ethical cost.

**Hypotheses 2 (H2).** Compared to firms located in middle and western regions of China, buyer firms located in the eastern regions of China would enjoy more significant positive effects of CSR performance on long-term M&A performance.
2.4. CSR, Related-Party Transactions, and Long-Term M&A Performance

Related-party M&A happens when a listed firm conducts a M&A transaction with its controlling shareholder. In a broad sense, the controlling shareholder and the shareholder’s controlled firms are all related parties to the listed firm [49]. Studies regarding related-party M&A have mainly focused on the motivations of the controlling shareholder. These studies have indicated that related-party transactions are not always either beneficial or harmful [50].

The “Resource Hollowing” effect [9] shows the negative aspect of related-party transactions. Significant evidence exists to show that controlling shareholders are more likely to tunnel through related-party transactions than to prop up a firm [51–53]. With respect to M&A activities, there are also negative effects of related-party transactions. For example, Boateng et al. (2017) [54] found that an acquiring firm’s operating performance significantly deteriorates after the acquisition. However, good governance has a significantly positive effect on the acquiring firm’s performance. Furthermore, the related-party transactions negatively affect the operating performance.

Related-party transactions could also bring about “Efficiency Enhancing” effects [11,13] as follows: (1) Such transactions could reduce search costs and exorbitant prices when firms acquire factors from imperfect markets (especially in emerging markets). (2) Related-party transactions can reduce the extent of information asymmetry and facilitate communication, and then enhance contract implementation. (3) When unexpected changes occur in the market environment, related-party transactions could guarantee contract implementation [12]. Actually, evidence indicates that the true effects of related-party transactions depend on the actual situation [55].

Based on the above analysis, there are contradictions in the related studies. However, our study focuses on CSR performance linkages in the context of M&A activities. From the “Resource Hollowing” perspective, if the buyer is more socially responsible, the buyer would experience low information asymmetry [56] and will be more likely to have better corporate governance, because there is a significant positive linkage between CSR and corporate governance [57,58]. Thus, the buyer in this situation will be less likely to tunnel through related-party M&A transactions than those firms with lower CSR performance. This is because good governance can alleviate the negative aspects of the “Resource Hollowing” effect [54]. From the perspective of the “Efficiency Enhancing” effect, the controlling shareholder plays the role of intermediary in related-party M&A transactions. Thus, there is no inferior party in terms of information, which consequently reduces the possibility of conflicts. Therefore, related-party M&A transactions might facilitate the communication and integration processes between buyers and target firms. The sharing and diffusing of knowledge would be more unobstructed, and the knowledge sharing and cooperation in CSR activities is also more likely to happen [59]. Hence, we propose the following hypothesis:

**Hypotheses 3 (H3).** In related-party M&As, a buyer’s CSR performance will have more positive effects on long-term M&A performance than non-related parties.

3. Method

We use M&A deals conducted from 2012 to 2014, by listed firms from China’s Shanghai and Shenzhen stock markets as our sample. To avoid the potential bias caused by inappropriate data, we eliminate following observations: (1) buyers’ businesses that mainly operate in the finance industry. Financial reports from financial enterprises are distinguished from those of non-financial enterprises, and thus, it is inappropriate to analyze them together. (2) We also eliminate firms which conducted M&A deals two times or more during the period. In these observations, the effects of different M&A deals would get mixed up, which would impair the empirical results. (3) We eliminate observations with incomplete data. (4) We also eliminate special treatment list firms, which may cause very high volatility in key indicators, due to their high delisting risk. After the elimination of the above observations, the final sample includes 1090 observations.
3.1. Measures

3.1.1. Dependent Variable

Many studies employ EPS to measure a firm’s performance [36,60]. However, there is no clear-cut boundary between short-term and long-term when measuring M&A performance [61]. Spicer (1978) [36] suggested that finance indicators based on yearly data could also represent longer-term performances. Zollo and Meier (2008) [61] carried out an in-depth study of the measurement of M&A performance. They found that long-term performance measures (such as accounting variables, long-term Cumulative Abnormal Returns (CAR), and customer retention) are closely related to each other. However, all of these measures are isolated, with short-term performance measured by short-window CAR. These studies reveal that firm finance indicators across several years could be used to measure long-term M&A performance. Therefore, we use variations of EPS between the period from one year before to one year after the M&A deals (DiffEps) as the proxy of a firm’s long-term M&A performance. To eliminate industry differences in EPS values, individual firms’ EPS had minus industry average EPS before calculating the value of dependent variables.

3.1.2. Independent Variable

In recent years, a third-party organization, the RKS (Rankins CSR Ratings) has improved its CSR ranking system. The 2012 edition of the RKS index referenced ISO26000 CSR standards and further considered the actual situation of Chinese firms. This is one of the best CSR indexes in mainland China. The RKS index includes 15 first level indexes and 63 second level indexes. These indexes cover issues of CSR management, economic responsibility, environmental responsibility, social responsibility, CSR disclosure, etc. Therefore, we chose the RKS index to measure the CSR performance of our sampled firms.

3.1.3. Control Variables

Previous studies have indicated that the buyer’s size, deal size, leverage ratio, and level of state ownership all have effects on M&A performance [3,13,62–64]. Following the study of Wang and Kan (2014) [63], and Xu et al. (2016) [64], we controlled factors that might influence M&A performance. These factors include firm size (LnStaff), as measured by the natural logarithm of the number of employees [65], deal size (Dealsize), measured by the ratio of deal volume to the firm’s total assets; debt level (LnDebt), measured by the natural logarithm of a firm’s leverage ratio; state-owned enterprise (State) (if the firm is owned by the state, we then assign a value of 1, otherwise, we assign a value of 0, and year (to control the year effect, we employ two year dummies, namely Y2012 and Y2013).

In addition to the above control variables, we also include the degree of monopoly (Mono) and ownership concentration (Top1) as control variables in the Heckman first stage logit regression model. Related studies indicate that industry competition could exert external governance effects by constraining manager behavior [66]. In addition, the condition of corporate governance has a significant impact on the level of CSR information disclosure [67,68]. A recent study of Chinese listed firms found that firms in low monopoly industries are more likely to disclose CSR reports [69]. Evidence also indicates that the dispersal of ownership could weaken the level of manager supervision and reduce the desire to voluntarily disclose information [70]. Therefore, we included these two variables in the logit regression model. The variable Mono is calculated by the ratio of the top four market share firms’ sales volumes to that of the total industry [71]. The variable Top1 is calculated by the shareholding ratio of the largest shareholder.

The logit regression does not include Dealsize. To avoid serious collinearity between the error correction term of the Heckman second-stage model and the variable LnStaff. The firm size in the Heckman first-stage model was measured by the natural logarithm of a firm’s total assets (LnAsset). Besides these variables, we also tried to introduce performance indicators such as ROE and revenue growth in the logit regression. However, the value of Chi square decreases significantly (from 34.19
to 32.04). This means these two variables undermine the explanatory power of the model. Thus, we eliminate those two performance variables from the regression.

3.1.4. Grouping Variables

Following Wan and Zheng (2014) [72], we use geographical regions and transaction modes to divide our sample into groups. We then compared the differences of the main effects in each regression model. We used the variable “east region” to divide the sample into two groups, as follows: If the buyer firm is registered in the eastern region of mainland China, we assign a value of 1; all others are assigned a value of 0. We used the variable “related” to divide the sample into two groups, namely related-party M&A and unrelated-party M&A. If the deal involved related party M&As, we assigned a value of 1; otherwise, we assigned a value of 0.

3.2. Model and Estimation

Many buyers in the sample did not disclose their CSR reports. As such, no CSR ranking data are attached to these observations. Hence, the OLS regression results may suffer from bias if we only use a sample that consists of firms which voluntarily disclose CSR reports, as the results may not represent the relationship between CSR and M&A performance in the whole population.

Firms that perform better in terms of CSR are more likely to disclose reports, and this would introduce a self-selection bias. We chose a Heckman two-stage model [73] to correct the endogeneity caused by this self-selection bias, as the model is widely used in studies of environmental and economic benefits produced by voluntary choices [74]. The Heckman two-stage model, as the name suggests, consists of two stages. In the first stage, using the whole sample of listed firms’ M&A observations, we introduce the variable \( \text{Volun} \). We assign a value of 1 in observations in which firms had voluntarily disclosed CSR reports, and we assigned a value of 0 to all other observations. Then, we used a Logit model to calculate the possibility of buyers voluntarily disclosing CSR reports, and we obtained the Inverse Mills Ratio (IMR). The estimation model of this stage is presented in Formula (1).

\[
\text{Volun} = \beta_0 + \beta_1 \text{LnAsset} + \beta_2 \text{LnDebt} + \beta_3 \text{State} + \beta_4 \text{Mono} + \beta_5 \text{Top1} + \beta_6 \text{Y2012} + \beta_7 \text{Y2013} + \epsilon \tag{1}
\]

In the second stage, we introduced IMR as a control variable into the OLS regression models, in order to correct the potential bias caused by self-selection. We further estimated the relationship between CSR and M&A performance in the whole sample, including those observations in which firms did not disclose CSR reports [75]. The estimation model of the second stage is presented in Formula (2).

\[
\text{DiffEps} = \beta_0 + \beta_1 \text{Lnstaff} + \beta_2 \text{Dealsize} + \beta_3 \text{LnDebt} + \beta_4 \text{State} + \beta_5 \text{IMR} + \beta_6 \text{Y2012} + \beta_7 \text{Y2013} + \epsilon \tag{2}
\]

4. Results

4.1. Descriptive Statistics and Correlations

Table 1 presents descriptive statistics of the variables in the Heckman second-stage regressions. The distributions of the dependent variable, \( \text{DiffEps} \), and the control variable, \( \text{Dealsize} \), are more dispersed than other variables. The mean of independent variable CSR is relatively low, which shows the average level of the CSR performance of China’s firms is relatively low. No high correlation exists between variables, and thus, the multi-regressions might not suffer from collinearity problems.
Table 1. Descriptive statistics and correlations.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>1 DiffEps</td>
<td>−0.025</td>
<td>0.413</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2 CSR</td>
<td>35.860</td>
<td>9.070</td>
<td>0.104</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3 LnStaff</td>
<td>7.530</td>
<td>1.107</td>
<td>0.151 *</td>
<td>0.308 ***</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>4 Dealsoize</td>
<td>0.203</td>
<td>0.593</td>
<td>0.428 ***</td>
<td>−0.101</td>
<td>−0.022</td>
<td>1</td>
<td></td>
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<tr>
<td>5 LnDebt</td>
<td>−1.053</td>
<td>0.729</td>
<td>0.060</td>
<td>0.030</td>
<td>0.386 ***</td>
<td>0.063</td>
<td>1</td>
</tr>
<tr>
<td>6 State</td>
<td>0.379</td>
<td>0.487</td>
<td>0.193 *</td>
<td>0.165 *</td>
<td>0.326 ***</td>
<td>0.039</td>
<td>0.334 ***</td>
</tr>
<tr>
<td>7 IMR</td>
<td>2.290</td>
<td>0.479</td>
<td>0.038</td>
<td>−0.258 ***</td>
<td>−0.565 ***</td>
<td>0.212 **</td>
<td>−0.401 ***</td>
</tr>
</tbody>
</table>

N = 124; * p < 0.1, ** p < 0.05, *** p < 0.01.

4.2. Heckman Two Stage Regressions

The results of the Heckman first-stage OLS regression are presented in Table 2. The coefficient of LnAsset is positive and significant (0.536, p < 0.01), indicating that large firms are more likely to disclose CSR information. We also obtain the value of the Inverse Mills Ratio (IMR) through the logit model.

Table 2. Heckman First Stage Logit Model.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>LnAsset</th>
<th>LnDebt</th>
<th>State</th>
<th>Mono</th>
<th>Top1</th>
<th>Y2012</th>
<th>Y2013</th>
<th>Constant</th>
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<tr>
<td></td>
<td>0.536 ***</td>
<td>−0.166</td>
<td>0.275</td>
<td>−1.071</td>
<td>−0.001</td>
<td>0.241</td>
<td>−0.033</td>
<td>−13.590 ***</td>
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<tr>
<td></td>
<td>(0.113)</td>
<td>(0.153)</td>
<td>(0.222)</td>
<td>(0.872)</td>
<td>(0.007)</td>
<td>(0.252)</td>
<td>(0.224)</td>
<td>(2.491)</td>
</tr>
</tbody>
</table>

N = 1090; dependent variable: Volun; standard errors in parentheses; *** p < 0.01.

The results of the Heckman second-stage OLS regression are presented in Table 3. Model (1) is the base model, which only includes control variables and IMR. The results indicate that LnStaff, Dealsoize and State were all significantly positively related to the dependent variable DiffEps.

Table 3. Heckman Two Stage OLS Regressions.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Base</th>
<th>Whole Sample</th>
<th>East Region</th>
<th>Non-East Region</th>
<th>Related Party</th>
<th>Non-Related Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>0.006 *</td>
<td>0.009 **</td>
<td>−0.006</td>
<td>0.009 **</td>
<td>0.009 **</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.004)</td>
<td>(0.008)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>LnStaff</td>
<td>0.081 **</td>
<td>0.071 *</td>
<td>0.084 *</td>
<td>0.038</td>
<td>0.098</td>
<td>0.067</td>
</tr>
<tr>
<td></td>
<td>(0.036)</td>
<td>(0.037)</td>
<td>(0.045)</td>
<td>(0.050)</td>
<td>(0.058)</td>
<td>(0.057)</td>
</tr>
<tr>
<td>Dealsoize</td>
<td>0.274 ***</td>
<td>0.277 ***</td>
<td>0.300 ***</td>
<td>0.015</td>
<td>0.252 ***</td>
<td>0.219 **</td>
</tr>
<tr>
<td></td>
<td>(0.032)</td>
<td>(0.030)</td>
<td>(0.028)</td>
<td>(0.179)</td>
<td>(0.041)</td>
<td>(0.092)</td>
</tr>
<tr>
<td>LnDebt</td>
<td>−0.019</td>
<td>−0.006</td>
<td>0.003</td>
<td>−0.113</td>
<td>0.087</td>
<td>−0.064</td>
</tr>
<tr>
<td></td>
<td>(0.054)</td>
<td>(0.054)</td>
<td>(0.063)</td>
<td>(0.114)</td>
<td>(0.118)</td>
<td>(0.067)</td>
</tr>
<tr>
<td>State</td>
<td>0.166 **</td>
<td>0.160 **</td>
<td>0.231 **</td>
<td>0.237 *</td>
<td>0.127</td>
<td>0.230 *</td>
</tr>
<tr>
<td></td>
<td>(0.080)</td>
<td>(0.081)</td>
<td>(0.102)</td>
<td>(0.120)</td>
<td>(0.125)</td>
<td>(0.132)</td>
</tr>
<tr>
<td>IMR</td>
<td>0.143</td>
<td>0.159</td>
<td>0.141</td>
<td>0.075</td>
<td>0.315 **</td>
<td>0.063</td>
</tr>
<tr>
<td></td>
<td>(0.098)</td>
<td>(0.102)</td>
<td>(0.121)</td>
<td>(0.179)</td>
<td>(0.152)</td>
<td>(0.143)</td>
</tr>
<tr>
<td>YEAR</td>
<td>control</td>
<td>control</td>
<td>control</td>
<td>control</td>
<td>control</td>
<td>control</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.245</td>
<td>0.257</td>
<td>0.335</td>
<td>0.295</td>
<td>0.473</td>
<td>0.103</td>
</tr>
<tr>
<td>F</td>
<td>16.420 ***</td>
<td>18.900 ***</td>
<td>27.580 ***</td>
<td>2.877 **</td>
<td>27.340 ***</td>
<td>1.490</td>
</tr>
<tr>
<td>N</td>
<td>124</td>
<td>124</td>
<td>99</td>
<td>25</td>
<td>46</td>
<td>78</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses; * p < 0.1, ** p < 0.05, *** p < 0.01.

Hypothesis 1 predicts a significant positive relationship between CSR and M&A performance. The results in model (2), which has introduced an independent variable based on the base model, which in turn indicates that the coefficient of CSR is significant and positive (0.006, p < 0.10), thus supports Hypothesis 1.

Hypothesis 2 predicts that a more significant relationship exists between CSR and M&A performance in those firms located in eastern geographical regions. Models (3) and (4) check the
relationship between CSR and M&A performance in the two groups of firms that are located in eastern regions and other regions, respectively. The results indicate that the coefficient of CSR is 0.009 (p < 0.05) in model (3), which is more positive and significant than that in model (4) (−0.006, p > 0.10). Therefore, Hypothesis 2 is supported.

Hypothesis 3 predicts that a more significant relationship exists between CSR and M&A performance under related-party M&As than in unrelated party M&As. Models (5) and (6) have compared the relationship between CSR and M&A performance in two groups, namely related-party M&A and unrelated-party M&A. The results indicate that related-party M&As enjoy a stronger and more significant effect (0.009, p < 0.05) than unrelated-party M&As (0.002, p > 0.10). Thus, Hypothesis 3 is supported.

It is important to note that the variable IMR is only significant in model (5), indicating there was no significant sample selection bias caused by using observations from firms that voluntarily disclose CSR reports to represent the whole population. This finding is consistent with the results of previous studies [76].

4.3. Robustness Check

To check for robustness, we ran the regressions again with 100 times bootstrapping. The results, which are presented in Table 4, are consistent with the results in Table 2, thus indicating that our conclusions are relatively robust.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Base</th>
<th>Whole Sample</th>
<th>East Region</th>
<th>Non-East Region</th>
<th>Related Party</th>
<th>Non-Related Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>0.006 *</td>
<td>(0.003)</td>
<td>0.009 **</td>
<td>(0.004)</td>
<td>−0.006</td>
<td>(0.012)</td>
</tr>
<tr>
<td>IMR</td>
<td>0.143</td>
<td>(0.105)</td>
<td>0.159 *</td>
<td>(0.096)</td>
<td>0.141</td>
<td>(0.104)</td>
</tr>
<tr>
<td>Control VARs</td>
<td>control</td>
<td>control</td>
<td>control</td>
<td>control</td>
<td>control</td>
<td>control</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.245</td>
<td></td>
<td>0.257</td>
<td></td>
<td>0.335</td>
<td></td>
</tr>
<tr>
<td>chi2</td>
<td>47.11 ***</td>
<td>42.02 ***</td>
<td>46.59 ***</td>
<td>6.051</td>
<td>29.23 ***</td>
<td>8.957</td>
</tr>
<tr>
<td>N</td>
<td>124</td>
<td></td>
<td>124</td>
<td></td>
<td>99</td>
<td></td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses; * p < 0.1, ** p < 0.05, *** p < 0.01.

5. Discussions and Implications

5.1. Effects of CSR on Long-Term M&A Performance

The results of this study indicate that CSR has a positive effect on long-term M&A performance. This finding is consistent with previous researches into CSR and firm financial performance linkages, which found positive effects of CSR [24–26,36]. The finding is also consistent with related studies in the context of emerging economies [27,37,38], and related studies in the context of M&A [3]. However, our results are not consistent with previous studies that suggest CSR has a negative effect on performance [18,19]. Those studies also found no significant CSR-performance linkage [22,23]. The results mean that synergy of CSR could also be generated in M&A activities. This is because the heterogeneity between a buyer’s and an acquired company’s CSR experiences can trigger the learning effect and consequently improve the new firm’s CSR performance through integration and synergy. Compared to those studies which directly examine CSR and firm performance, our study evaluates the economic effect of CSR in the context of M&A activities. The methods we use have the advantage of alleviating endogeneity bias and thus make our findings more robust. Furthermore, our study provides more evidence from emerging economies, where undertaking social responsibility is not widely accepted and is seriously considered by most firms.
5.2. Effects of Geographical Regions on CSR-Performance Linkage

This paper has introduced geographical regions as one contingent factor, as the states of development of different regions are imbalanced in China. The results indicate a significant positive effect of CSR on long-term M&A performance in the sub-sample of buyer firms from the eastern region of China. Conversely, there is an insignificant negative effect in the sub-sample of buyer firms from the middle and western regions of China. Our findings are consistent with previous studies, which found that marketization could facilitate knowledge flow [46] and information disclosure [48] between firms. This result could be explained by the following reasons: First, the eastern regions of China have a superior market environment, which is more favorable to knowledge diffusion and spill-over. Firms operating under these circumstances would be more likely to generate the “spill over” effect of their CSR capabilities in the integration process, thus enhancing long-term M&A performance. Secondly, the economy of the eastern regions is more advanced, and the public are more conscious of CSR. As such, firms who are more socially responsible are more likely to be “rewarded” by their stakeholders and consequently achieve higher performance in M&A activates.

5.3. Effects of Related-Party Transactions on CSR-Performance Linkage

Our study has explored the effects of related-party transactions on CSR-performance linkage. The results indicate that related-party transactions enjoy a more positive CSR effect on long-term M&A performance than those with non-related party transactions. Our findings are contradicted by some studies, which concluded CSR leads to a “Resource Hollowing” effect [9,51–54]. However, our findings are consistent with studies which concluded CSR brings about an “Efficiency Enhancing” effect [11–13]. Our findings also support studies that suggest the contingency perspective on related-party transactions [55]. This finding reflects the “value added” aspect of related-party transaction to those firms with high CSR performance. Firms with higher CSR performance are more likely to enjoy better corporate governance, and managers are more likely to be better supervised and motivated. This will decrease the possibility of “resource hollowing” and boost the effect of “efficiency enhancing”, thus consequently enhancing the synergy effect of M&A activities. Therefore, we argue that the effects of related-party transactions should be considered contingently in CSR research.

5.4. Implications

Our findings also have certain implications to practice. Firstly, we provide evidence about the economic effect of CSR, which indicates that firms should actively fulfill social responsibility, in order to get greater rewards from their economic activities. Secondly, the different effects of CSR in different regions might reflect the imbalance of the public’s awareness of CSR, as well as the different market environments, from region to region. Therefore, the government should introduce policies to improve market environments and encourage firms to fulfill their social responsibility requirements. Lastly, related-party transactions might also have a positive aspect. Regulatory authorities should encourage the “value added” effect of related party-transactions in M&A activities (while avoiding the adverse effects) by improving the standards of corporate governance and enhancing the level of supervision of listed firms.

6. Conclusions

The CSR-performance linkage has been widely discussed in literature, as the economic consequences of CSR are both theoretically and practically important. This study focuses on the impacts of CSR on long-term M&A performance. We also adopted a contingency view by introducing two group variables, namely geographical regions and related-party transactions. Using data collected from listed firms in China’s Shanghai and Shenzhen stock market during the 2012 to 2014 period, theoretical hypotheses were tested, and conclusions were drawn as follows:
CSR has a positive effect on long-term M&A performance in China. In an emerging economy, the extent of market development and levels of CSR awareness are lower than in developed countries. This study evaluates the economic impact of CSR on long-term M&A performance using a Heckman model, thus taking advantage of alleviating endogeneity bias. We therefore provide more robust evidence from emerging economies. This finding indicates that firms which act in a socially responsible manner could also be rewarded in emerging economies, where undertaking social responsibility is not widely accepted and is seriously considered.

The relationships between CSR and long-term M&A performance are significantly different across different geographical regions in China. Namely, comparing to their counterparts in the middle and western regions of China, firms in eastern regions enjoy more benefits in M&A performance by fulfilling CSR. Compared to other studies that focus on CSR differences across regions [42–44], this paper further explores different CSR-performance linkages across regions. Our study indicates that different markets, legal requirements, and governance environments might have significant effects on CSR-performance linkages.

Compared to unrelated-party M&As, related-party M&As have experienced more significant CSR effects on M&A performance in China. Our findings support studies which found the “Efficiency Enhancing” effect [11–13], as well as studies suggesting the contingency perspective on related-party transactions [55]. We also further explore the contingent influence of related-party transactions on CSR-performance linkage. This finding indicates that more socially responsible buyers might be likely to safeguard all stakeholder benefits, instead of “hollowing” the resources of the controlling shareholder.

Although our study contributes to existing literature, it also has limitations. First, this study examined CSR-performance linkage in the context of M&A activities, even correcting endogeneity bias to some extent. However, our study also limited observations only to those firms involved in M&A activities. Secondly, the sample used in this study is only from China’s listed firms. Thus, the conclusions drawn from the sample might not be applicable to situations in developed countries, as there are differences in the degrees of market development, regulations, and CSR awareness.

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**Conflicts of Interest:** The authors declare no conflict of interest.

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