

“Does external assurance on CSR reporting contribute to its higher quality? Empirical evidence from China”

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DOES EXTERNAL ASSURANCE ON CSR REPORTING CONTRIBUTE TO ITS HIGHER QUALITY? EMPIRICAL EVIDENCE FROM CHINA

Abstract

This paper examines the difference that the assurance brings to the quality of CSR reports in the Chinese institutional setting, in particular, the difference in quality (proxy – RKS ranking) of assured and unassured CSR reports, as well as whether the high ownership concentration and corresponding to it “entrenchment effect” obstruct the positive impact the assurance exerts on the quality of CSR reports. The paper examines CSR reports on 2,292 firm-year observations of large Chinese companies over three years (2015–2018). The hypothesis development process predicates on the signaling and stakeholder theories, whilst this study applies regression analysis to test the hypotheses.

Consistent with the predictions of signaling and stakeholder theories, the paper finds that assurance contributes to the higher quality of CSR reports. Moreover, the study finds that assured CSR reports have higher sub-scores in all four aspects of RKS ranking. However, as ownership concentration exceeds 50 per cent and reaches the majority, it thwarts the advancement in the quality of CSR reports through its assurance.

The paper provides an initial empirical account of the role of assurance in the emerging CSR reporting practice in China. The paper contributes to the modest body of empirical research on the function of external assurance in the CSR area by explicating the role played both by the accounting (external assurance) and corporate governance (ownership concentration) infrastructure to ensure high quality of CSR reporting. The paper briefs local, international regulatory authorities and the business community about the importance of external assurance for the CSR reporting quality.

Keywords

corporate social responsibility (CSR) reports, external assurance, ownership concentration, entrenchment effect, China

JEL Classification

G34, M14, M41

INTRODUCTION

Corporate social responsibility (hereafter CSR) has considerably impacted business communication worldwide (Bollas-Araya et al., 2019; Maroun & Prinsloo, 2020), since a corporate social responsibility report (CSRR) has become the main vehicle organizations worldwide utilize to communicate their economic, social and environmental performance (Bollas-Araya et al., 2019; Braam & Peeters, 2018; Chi et al., 2020; Sharma, 2019), succumbing to the pressure placed on them by various stakeholders. The KPMG's latest survey finds that 80 percent (compared to 18 per cent in 2002) of N100 companies (the top 100 companies by revenue in each of the 52 countries and jurisdictions researched) worldwide and 96 per cent (compared to 45 per cent in 2002) of G250 companies (the world's 250 largest companies by revenue as defined in the Fortune 500

ranking of 2019) now report on sustainability (KPMG, 2020, p. 10). Research-wise CSR also proliferates being a cluster trending upward in A* and A journals ranked according to the Australian Business Deans Council (ABDC) (Zengul et al., 2021; Pasko, Chen, et al., 2021).

The spread of CSRR is accompanied by concerns about the credibility of the information being provided to stakeholders (Ackers, 2017; Boiral, 2013; Boiral & Heras-Saizarbitoria, 2020; Channuntapipat et al., 2019; Milne et al., 2009; Tregidga et al., 2014). Just as this practice is consolidated, the need for credible information in this area is critical and palpable (Bollas-Araya et al., 2019). The market and stakeholders have a favorable response to CSR disclosures, but they fail to comprehend whether such disclosures are credible (Farooq & de Villiers, 2019; Gürtürk & Hahn, 2016; Hummel et al., 2019; Lu & Abeysekera, 2021; Manetti & Becatti, 2009; Maroun, 2020). The response to that concern has been a corresponding increase in corporate social responsibility assurance (CSRA). Moreover, KPMG avers that “assurance of sustainability becomes a majority practice” (KPMG, 2020, p. 23) as 51 per cent (33 per cent in 2005) of N100 companies and 71 per cent of G250 companies (30 per cent in 2005) assured their sustainability reports (KPMG, 2020, p. 23).

Unlike CSRR, CSRA remains mostly voluntary, which means that firms volunteer to verify CSRRs by initiating an external quality assurance process led by independent auditors, experts or consultants who produce their assurance report communicating through it their opinion (Chi et al., 2020; Miralles Quirós et al., 2021; Venter & van Eck, 2021). This external verification process incurs extra costs that companies will only be predisposed to cover if they can discern that this will bring them some benefits (Miralles Quirós et al., 2021).

Independent third-party assurance of the content and structure of CSRR is intended to improve the relevance, reliability and comparability of these reports and, for this reason, increase the overall credibility of CSRR (De Beelde & Tuybens, 2015; Maroun & Prinsloo, 2020; Pasko, Balla, et al., 2021; Simnett, 2012; Zorio et al., 2013). However, the unregulated and loosely controlled nature of the assurance process, the presence of several varying standards for CSRA (as well as the scope and level of assurance), panoply of assurance providers entails that the assurance can vary significantly (De Beelde & Tuybens, 2015; Perego & Kolk, 2012). Besides the external benefits already mentioned, CSRA can play a crucial role in establishing/enhancing the internal mechanisms and management of firms, as it is believed that companies strive for accurate data confirmed by a third party to build their decision-making processes and business strategy (Zorio et al., 2013).

Despite growing demand for CSRR, few studies so far have investigated whether CSRA contributes to the higher quality of CSRR (Du & Wu, 2019; Maroun, 2019; Moroney et al., 2012). Sensing that dearth of research into this developing field, the paper sets to investigate this link in a Chinese institutional setting. The paper aims to find out whether the CSRA affects the quality of the CSRR itself and what mechanics is here at play (which theory best suitable to explicate this). In addition to this, the paper investigates whether the ownership concentration reaching the level of “entrenchment effect” hinders a positive impact the assurance exerts on the quality of CSRR.

The remainder of this paper is structured as follows. Section 1 provides a brief overview of theories explicating the incentives for assurance on CSRR, debates a literature review, and develops hypotheses. Section 2 discusses the method, including sample selection and research design, and Section 3 presents the findings. Section 4 is a discussion, including limitations and possible directions for future research, and finally, the paper wraps up with conclusions.

1. THEORETICAL BACKGROUND, LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Extant research to capture the assurance effects focuses on several theories conditionally divided into two groups: economics-based (e.g., agency theory) and social-political theories (e.g., legitimacy theory, signaling theory, stakeholders' theory) (Ahmed Haji & Anifowose, 2016; Cormier et al., 2005).

1.1. Agency theory

Agency theory regards an audit as an independent monitoring function, which is carried out to verify management actions and deeds to meet the needs of shareholders, thus leading to reduced information asymmetry. Previous research shows that external assurance reduces agency costs associated with information asymmetry (Carey et al., 2000) and safeguards a firm's reputation (O'Dwyer et al., 2011). In accordance with the basic principles of agency theory, the independent third party assurance might compensate for the inability of outside shareholders to follow the actions of insiders directly (Forst & Hettler, 2019). Therefore, prior literature recognizes the extent of agency conflicts as the chief factor for audit demand (Anderson et al., 1993; Chow, 1982; Forst & Hettler, 2019; Tahir et al., 2020).

1.2. Stakeholder-agency theory

Stakeholder-agency theory considers managers as unique stakeholders who are at the center of the nexus of contracts. Given a manager's central position and insider knowledge, managers are "agents", but not shareholders' agents, but stakeholders (Hill & Jones, 1992). Stakeholder-agency theory links management to their stakeholders, who have a claim on a company (Moroney et al., 2012). Stakeholder-agency theory presupposes that managers have contractual relationships with all types of stakeholders and thus work as "agents" for them (Dutta & Dutta, 2020). In situation of "stakeholder diffusion" (when stakeholders are dispersed and no one individually controls serious resources on their own), the need for "monitoring structures" arises to monitor management performance (Hill & Jones, 1992). External assurance on CSRR, giv-

en its mostly voluntary status, qualifies to be and may also be regarded as a "monitoring structures".

Counter to agency theory, social-political theories, such as legitimacy or stakeholder theories, bring a more all-encompassing perspective on CSRR as they explicitly acknowledge that "organizations evolve within a society that encompasses many political, social and institutional frameworks" (Cormier et al., 2005, p. 7).

1.3. Legitimacy theory

In legitimacy theory, corporations are seen as social creations, and their existence relies on the inclination of society to persist in allowing them to operate (O'Donovan, 2002). Thus, companies will behave in such a way that society will acknowledge them to be socially responsible (Fernandez-Feijoo et al., 2015; O'Donovan, 2002). As claimed by legitimacy theory, companies are obliged by a 'social contract' in which they consent to discharge various socially desired activities in exchange for endorsement of their objectives and other benefits, and this essentially safeguards their survival (Bollas-Araya et al., 2019; Fernandez-Feijoo et al., 2015). Accordingly, firms issue CSRR in an effort to legitimize their role in society (O'Dwyer et al., 2011), and assurance intended to bolster social behavior by adding credibility (Birkey et al., 2016; Fernandez-Feijoo et al., 2015).

In a situation where society's expectations are not being observed on part of the firm and society detects or perceives the company's behavior as not appropriate, a legitimacy gap might arise (Branco & Rodrigues, 2006, p. 236). In this case, the presence of third-party assurance fortifies social behavior by amplifying credibility of the report (Birkey et al., 2016; Fernandez-Feijoo et al., 2015). Therefore, articles examining the determinants of CSRA choice unequivocally state that "the need for enhanced credibility plays at least some role in the choice to seek assurance" (Birkey et al., 2016, p. 145).

1.4. Signaling theory

Signaling theory posits that non-financial reporting over various channels can lessen information asymmetry between managers and stakeholders (Connelly et al., 2011; Karaman et al., 2021).

Companies can determine to ‘signal’ their behavior to the outward parties because of this information asymmetry by assuring its CSRR (Simaens & Koster, 2013). Signaling theory springs from Spence’s paper from year 1973 exploring signaling at the labor market (Spence, 1973). Thereafter, management researchers have more and more often utilized signaling theory ‘to help explain the influence of information asymmetry in a wide array of research contexts’ (Connelly et al., 2011, p. 40). This theory implies the presence of three principal components in the signaling process such as the signaler, the signal itself, and the receiver of the signal (Connelly et al., 2011).

Overall, signaling is utilized to differentiate and highlight quality, intent and risk issues (Connelly et al., 2011; Li & Zhang, 2010). According to theory of Melumad and Thoman (1990), in audits within the voluntary context, the choice to recruit an external auditor is going to signal a firm’s low-risk type, whereas dodging an audit altogether signals to the contrary – a high-risk type (Melumad & Thoman, 1990). In light of this theory, and provided that a firm’s CSRR quality is indicative of its risk type, good CSR performers would be more inclined to attain external assurance on their CSRR as a signal of their low-risk type (Li & Zhang, 2010). Similarly, signaling distinguishes between high-quality firms and low-quality firms. The companies may be aware of their own actual quality, while outsiders are not, so information asymmetry exists. In this context, each company might avails itself of the opportunity to signal or not to signal its actual quality to outsiders (Connelly et al., 2011). In our case, the signaling takes place through the assurance provided by the independent third party. Hence, as a rule, low quality of CSRR would not make it to endure the stringency of assurance providers as the company chose a path to assure its CSRR signals to stakeholders the CSRR higher quality. Therefore, signaling theory assumes that higher corporate social responsibility performers are more prone to assure their CSRR externally.

1.5. Stakeholder theory

Stakeholder theory postulates that firms are part and parcel of a broader social system in which their businesses influence and are influenced

through the various stakeholder assemblies in society (Bollas-Araya et al., 2019; Deegan, 2002; Gray et al., 1995). Accordingly, firms act in accordance with what their stakeholders require. In view of this point, stakeholder insistence is expected to influence the assurance of CSRR and the pick of assessor (Fernandez-Feijoo et al., 2015).

This study is completely on board with Cormier et al. (2005), arguing that CSRR is a compound phenomenon that cannot be interpreted restrictively by one single theory. Nevertheless, it is believed that the assurance on CSRR best suitable to describe is the signaling theory. Despite pressure from stakeholders and companies’ efforts to obtain legitimate and compelling arguments, signaling theory is more convincing given the topic of this study. Firms ‘signal’ their higher quality through assurance on their CSRR, distinguishing themselves from low-quality firms that shun scrutiny from assurance providers. Companies incur additional costs to overcome the asymmetry of information, which is present between them and stakeholders, and add credibility to its CSRR. This study adapts a “signaling model” of Bagnoli and Watts (2017); however, here the approach can be called “stakeholder-signalling”, since it is the expectations of stakeholders and their positive assessment of what the companies are striving to attain.

1.6. Sustainability-related assurance and quality of CSR disclosure

Watts and Zimmerman, in their seminal article, explain that external audit assists in mitigating information asymmetry among managers and principals through strengthening the correctness, accuracy, completeness, veracity and reliability of financial statements (Watts & Zimmerman, 1983; Maroun, 2019). Follow-up studies were instrumental in finding out that higher audit quality corresponds with the lesser levels of discretionary accruals (Astami et al., 2017; Francis & Krishnan, 1999) and lesser level of the costs of capital (Coffie et al., 2018). Comparable to financial information external assurance, an independent CSRR audit might mitigate information asymmetry and ambiguity, generating bigger realized credibility to non-financial information (Bagnoli & Watts, 2017; Du & Wu, 2019; Edgley et al., 2010; Steindl, 2021).

Given that CSRR commonly incorporates discourse that is mostly favorable and beneficial from the firms' point of view, securing external assurance is regarded as a notably informative signal (Coram et al., 2009; Du & Wu, 2019; Dutta & Dutta, 2020). This is due to the fact that external assurance can, in some ways, backup and substitute for shortcomings in corporate governance systems and the legal mechanisms in place to safeguard investors' interests (Maroun, 2019; Simnett et al., 2009). Sustainability reports, subjected to scrutiny by an independent expert, can also encourage conformity with reporting regulations in use and advocate more thorough and factual reporting on social and environmental matters (Birkey et al., 2016; Moalla et al., 2020; Moroney et al., 2012).

Furthermore, CSRA might to be pursued by companies for which net gains are considerable, both from the perspective of reduced agency costs and enhanced confidence among users (Connelly et al., 2011; Simnett et al., 2009). According to this view, the Bagnoli and Watts (2017) signaling model is worth mentioning here again, according to which firms pursuing more socially responsible undertakings are more willing to procure external assurance and pick a separating equilibrium (Bagnoli & Watts, 2017). Prior studies are testament to that as they show that "socially responsible firms demand high-quality audits from external auditors" (Saeed et al., 2020). The selected prior studies on the effect of CSRA on CSRR quality and their findings are presented in Table A1 (see Appendix).

The most relevant for this study are findings delivered by Du and Wu (2019), Maroun (2019), and Moroney et al. (2012). There is a consensus that higher performers in corporate social responsibility are more willing to externally assure their CSRR, and vice versa, assured CSRR are of higher quality (Bagnoli & Watts, 2017; Koseoglu et al., 2021; Miralles Quirós et al., 2021; Saeed et al., 2020).

1.7. CSRA and CSRR quality: the role of major shareholders

Ownership concentration is an important indicator of a company's equity distribution, which often determines how it fares conflict-wise internally. When equity is dispersed, potential conflicts between principals and agents may exist, while the

external shareholders hope that management discloses more information to reduce the degree of information asymmetry. When the shareholding is concentrated, large shareholders may invade the interests of minority shareholders by preventing a company from disclosing information.

Depending on the difference in the shareholding ratio of major shareholders, the gap size between control rights and cash flow rights, and the nature of major shareholders, the conflict between major shareholders and minority shareholders could result in two scenarios: 1) incentive-alignment effect or 2) entrenchment effect (Arthur et al., 2019; Forst & Hettler, 2019; Jong & Ho, 2019; Rehman et al., 2021).

Therefore, when the goals of large shareholders and minority shareholders are matched, an alignment effect occurs. However, when the degree of ownership concentration rises to the extent that major shareholders can effectively govern the company, it produces an entrenchment effect, where entrenched insiders tend to achieve their own interest by depriving non-controlling investor (Rehman et al., 2021; Shleifer & Vishny, 1986, 1997; Srinidhi & Liao, 2020).

In accordance with the basic tenets of agency theory, the independent third party inspection might compensate for the unfitness of outside shareholders to follow the actions of insiders directly (Forst & Hettler, 2019). Therefore, prior literature recognizes the extent of agency conflicts as the main factor in audit demand (Anderson et al., 1993; Chow, 1982; Forst & Hettler, 2019; Tahir et al., 2020).

Thereby, insider ownership might bring a positive effect, reducing the agency conflict between corporate insiders and shareholders through adjusting their perspective interests. However, the threshold that borders incentive-alignment effect and entrenchment effect has no clear lines. Alignment effect situation alleviates the agency conflict and the calls for external audit declining accordingly. Yet, disproportionately higher levels of ownership could undo the positive alignment effect, transforming it into the entrenchment effect, the situation where outside shareholders are stripped partly of their due power and relay solely on information from major shareholders. Thus, while insider ownership assuages the Type I agen-

cy conflict between shareholders and managers, a high level of ownership concentration could switch it into detrimental effect creating Type II agency conflict between controlling and minority shareholders, where entrenched insiders can exploit their superior standpoint in a company to extricate special individual advantages at the cost of non-controlling investor (Forst & Hettler, 2019; Jong & Ho, 2019).

Thus, the Type II agency conflict revives the importance of external auditing on behalf of minority shareholders in an attempt to shed light on the insider's governance of the firm. However, with regard to entrenched insiders and their motivations and actions, opinions vary, with some arguing that they will use its power to obstruct the external audits, whereas others follow legitimacy and signaling theories thesis claiming the contrary: insider ownership incentives controlling investors to legitimate themselves in the eyes of minority shareholders and wider public and signal their openness (Forst & Hettler, 2019; Tahir et al., 2020). In other words, the literature argues that entrenched investors may employ strengthened external control as a self-bonding mechanism (Forst & Hettler, 2019; Jensen & Meckling, 1976).

In his epochal article, Chow (1982) claims that the main reason for recruiting an independent auditor is to reduce the information asymmetry between managers, shareholders and stakeholders (Chow, 1982). Forst and Hettler, on the sample of U.S. dual-class firms, find that insider ownership is positively related with audit charges, the probability of recruitment of a Big Four firm or expert auditor, and auditor independence, thus, testifying to the self-bonding mechanism through enhanced external assurance (Forst & Hettler, 2019).

The purpose of this study is to examine the contrast that assurance makes to the quality of CSRR in a Chinese institutional setting. Adopting signaling and stakeholder theories, the paper suggests that external assurance enhances the CSSR quality analogous to financial reporting case. Thus, this paper conducts a more refined analysis of interdependent and interrelated influence external assurance has on the quality of CSRR when coupled with ownership concentration and its corresponding entrenchment effect.

Thus, in line with the discussion above, the paper's hypotheses can be formally stated as follows:

- H1: Sustainability-related assurance significantly improves the quality of CSRR.*
- H2: Significant ownership concentration and its corresponding entrenchment effect are negatively associated with the quality of CSRR, and thus the positive effect of CSRA on quality of CSRR is thwarted by the "entrenchment effect".*

2. METHOD AND RESEARCH DESIGN

2.1. Sample selection and data collection

To test the abovementioned hypotheses, data of all listed companies on Shanghai and Shenzhen stock exchanges (China) were collected covering the period from 2015 to 2018. The CSRR score and CSR assurance data in this paper are all from "Rankins CSR Ratings" or Runlin Global's Rankings rating (hereafter referred to as RKS), and the remaining data originate from the China Stock Market & Accounting Research (CSMAR) database. The initial sample of 13,023 was screened (Table 1), and the final sample comprised 2,292 firms.

Table 1. Sample selection procedure

Action	Explication	Observations
1	A-share listed company on China's Shanghai and Shenzhen stock	13,023
2	Less: the financial industry companies	(353)
3	Less: *ST Company	(529)
4	Less: ST Company	(325)
5	Less: companies with missing data	(9,524)
6	Final sample	2,292

Note: ST means "special treatment" and occurs when a company suffers losses for two consecutive years or its net assets are lower than the par value of the stock. *ST is added to those companies' names whose operations have not improved in the third year after ST, which means delisting risk.

This paper uses statistical software STATA16.0 for data processing and statistical regression analysis.

2.2. Variable definition

CSR reporting quality. This paper resorts to CSR rankings produced by Rankins (RKS) Inc. (therefore referred to as RKS). It is known also as Runlin Global's Rankings rating or Runling CSR Ratings (Lee et al., 2017; Zhong et al., 2019). The Rankins (RKS) Inc. is a private, professional firm and rating agency established in Beijing and providing China-specific CSR assessments. RKS, although private, is an authoritative third-party rating agency enjoying solid reputation earned since 2008 when the company started tracking and assessing CSR reports issued by all A-share listed companies. CSR rankings by RKS during its existence have gone through a three-stage evaluation (Figure 1).

This study covers the period when RKS's latest version MCT 2012_1.2i was in force. This version of CSR rankings by RKS comprehensively evaluates the quality of CSR reports on the basis of four dimensional indicators: Macrocosm (M), Content (C), Technicality (T), and Industry (I), reflecting the performance and CSR Disclosure performance (Figure 2).

This version refers to ISO 26000:2010 – Social responsibility and begins to distinguish industry-related issues through developing industry-specific indicators for each of 22 industries according to classification endorsed by the China Securities Regulatory Commission (CSRC) (Zhong et al., 2019).

CSR assurance. CSR assurance is an independent variable. It is used to measure whether a company's annual CSR report has been inspected and as-

sured by an external assurer. If a company's CSR is audited, the value is 1, otherwise it is 0.

Ownership concentration. This paper uses the ratio of the shareholding ratio of the largest shareholder to the second largest shareholder to measure ownership concentration. It is suggested that the greater the ratio, the higher the concentration of the major shareholder's equity and the stronger its entrenchment effect.

Control variables. Control variables are included to enhance the internal validity of this study. The paper controls for firm size, firm age, leverage, return on assets, corporate growth, ownership rights type, board size and the dummy of year and industry.

The main variables are defined in Table A2 (see Appendix).

2.3. Model construction

This paper constructs the following two models. It first builds a model (1) to verify the first hypothesis of the study. The quality of the dependent variable CSR is measured as RKS rating total score (Score), and a regression model is constructed.

In the robustness test, when the total rating (Credit) is used as a dependent variable, its value is discrete, and a Poisson regression model is constructed; when the four sub-dimension indicators of RKS rating (M, C, T, and I) are used as a dependent variable, the regression is constructed model.

Source: Zhong et al. (2019).

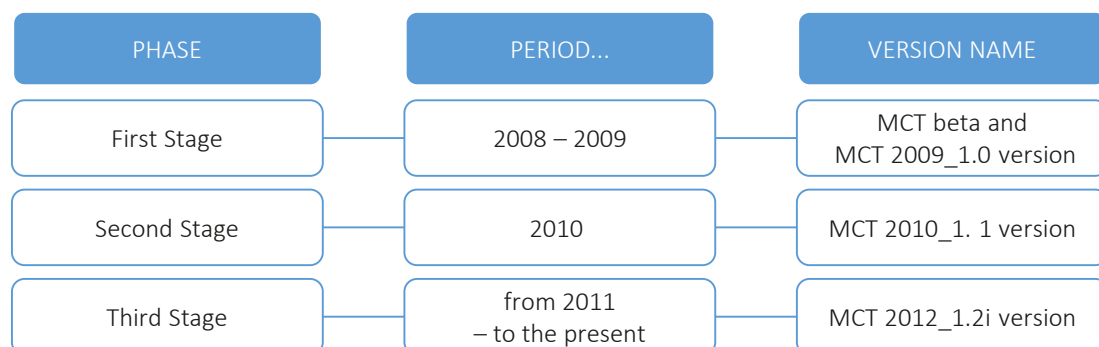


Figure 1. Evolution of CSR rankings by RKS

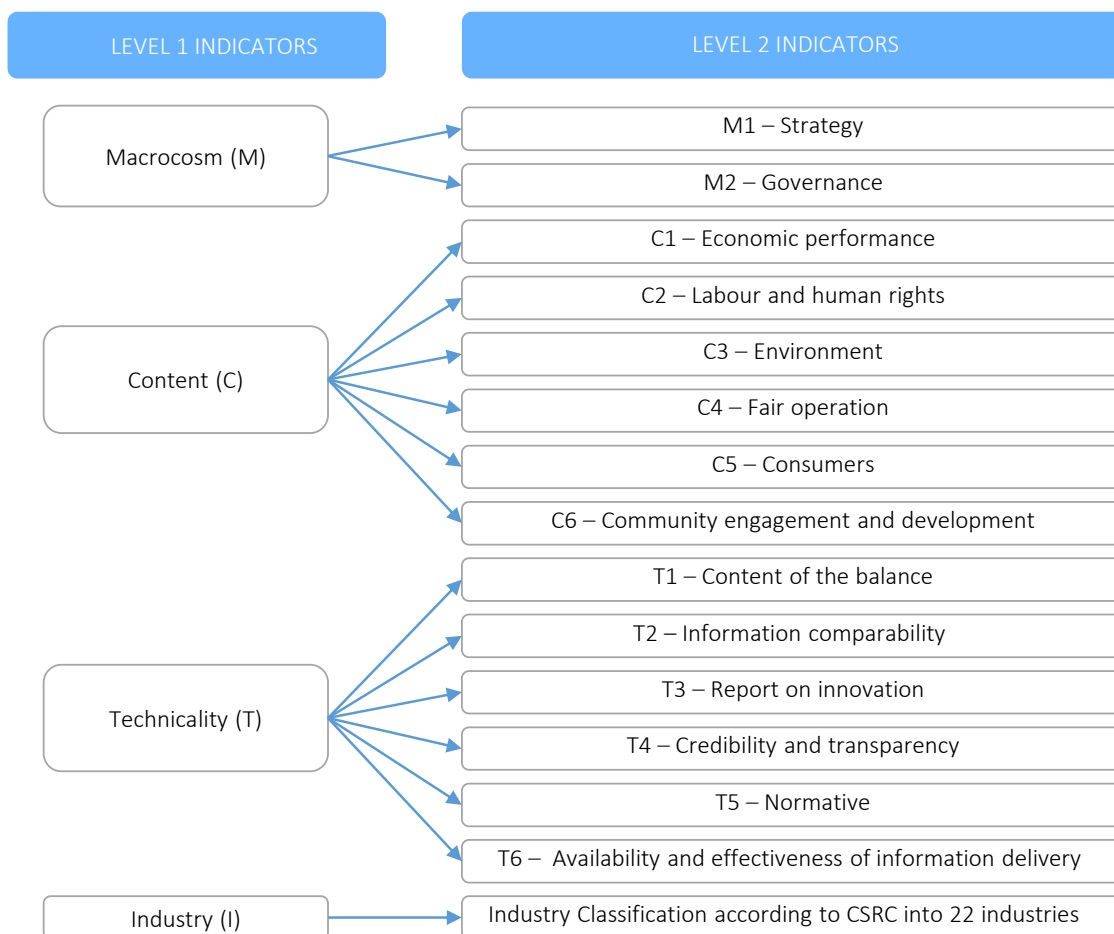


Figure 2. Indicators and sub-indicators of the RKS rating system, MCT 2012_1.2i version

$$CSR = \alpha_0 + \alpha_1 Audit + \sum \alpha_i Control + \varepsilon. \quad (1)$$

$$CSR = \alpha_0 + \alpha_1 Audit + \alpha_2 Audit \times FstMonitor + \alpha_3 FstMonitor + \sum \alpha_i Control + \varepsilon. \quad (2)$$

In the empirical regression of model (1), clustered by a company, control annual effect and industry effect, and report Robust-t value adjusted for heteroscedasticity. If the coefficient α_1 is significantly greater than 0, it indicates that the CSR reporting assurance is instrumental to enhance the quality of CSR information disclosure.

In the regression model (2), this paper introduces the proportion of major shareholders (FstMonitor) as the adjustment variable, and $Audit \times FstMonitor$ is the product of the proportion of assurance (Audit) and major shareholders (FstMonitor). If α_2 is significantly less than 0, it indicates that

the entrenchment effect of major shareholders is enhanced, which affects the quality of CSRR through the CSRA. Control represents the control variables.

In the paper, the variance inflation factor (VIF) function is run to test multicollinearity in the models. The test returned mean VIF 1.28 and 1.29, respectively. The results testify that there is no multicollinearity in both models, since, in general, when the maximum VIF value does not exceed 10, it is considered that there is no multicollinearity in the model.

3. RESULTS

3.1. Descriptive statistics and correlation analysis

The descriptive statistics of the main variables in this study are shown in Table 2.

Table 2. Descriptive statistics

Variables	N	Mean	Sd	Min	Max
Score	2,292	42.60	11.91	17.35	89.00
Audit	2,292	0.0196	0.139	0	1
FstMonitor	2,292	10.69	22.40	1.000	563.3
Size	2,292	23.41	1.449	19.78	28.52
Age	2,292	2.564	0.524	0	3.332
Lev	2,292	0.493	0.202	0.0341	2.302
Roa	2,292	0.0348	0.0748	-1.577	0.482
Growth	2,292	0.149	0.535	-0.941	15.58
Board	2,292	2.183	0.217	1.386	2.833
State	2,292	0.640	0.480	0	1

It can be seen from Table 2 that the average value of the total score of the CSR reporting of Chinese listed companies is only 42.60, and the standard deviation is as high as 11.91. This shows that the overall quality of China's CSR report is not very high yet, and the CSR reporting quality fluctuates from company to company. Moreover, the average value of Audit (CSR assurance) is only 1.96%, indicating that the practice of CSR assurance is in its infancy.

The correlation analysis results presented in Table 3 show that CSR reporting assurance (Audit) and CSR reporting quality (Score) are significantly (0.366) positively correlated at the 1% level. This indicates that the quality of CSR reports of companies that have conducted its assurance is significantly higher than that of companies that have not conducted audits.

For further analysis, statistical inspections are conducted to study various patterns between companies that assured their CSR reporting and those who did not do that, as well state-owned vs. private firms.

Table 3. Correlation analysis

Variable	Score	Audit	FstMonitor	Size	Age	Lev	Roa	Growth	Board	State
Score	1	2	3	4	5	6	7	8	9	10
Audit	0.366***	1								
FstMonitor	-0.0150	-0.0190	1							
Size	0.470***	0.181***	-0.043**	1						
Age	0.00500	0.0140	0.052**	0.136***	1					
Lev	0.161***	0.0270	0.046**	0.519***	0.157***	1				
Roa	0.039*	0.0160	-0.065***	0.00100	-0.0270	-0.406***	1			
Growth	0.00700	-0.0140	-0.039*	0.0170	-0.0170	-0.00100	0.150***	1		
Board	0.169***	-0.0100	-0.0180	0.181***	0.090***	0.074***	0.043**	-0.0340	1	
State	0.174***	0.0340	0.146***	0.267***	0.300***	0.176***	-0.050**	-0.062***	0.202***	1

Note: ***, **, and * represent statistical significance at the 1%, 5% and 10% levels, respectively.

3.2. Statistical inspection

3.2.1. The difference between companies that provide CSR reporting assurance and those that do not

The statistical test of the difference in the quality of CSR of companies that have conducted CSR report audits and those that have not is shown in panel I of Table 4. The results show that the total CSRR score (Score) of companies that conduct CSRA is significantly higher than that of companies that do not, and the significance level reaches 1%.

Moreover, the inspection found out that CSR reports of companies that conduct their assurance have higher sub-scores in all four aspects of RKS rating, namely macrocosm (M), content (C), technicality (T), and industry (I) than those that do not at a significance level of 1%. The two subcategories with the largest difference that CSR assurance brings to are content (13.678) and macrocosm (8.724), which are fully consistent with the hypothesis proposed in this study, since the assurers inspect foremost content of the reports.

3.2.2. The difference between state-owned vs. private companies

The statistical test results of the difference in the quality of CSR reports between state-owned vs. private companies are shown in Table 4, panel II. It can be seen that the total scores and sub-items of CSR reports of state-owned enterprises are higher than non-state-owned enterprises, and are significant at the 1% level. Again the RKS indicator where the biggest divergence is noted is content (C) (2.008). This indicates that the quality

Table 4. Differences between companies on dummy variables: Audit and State

	Audit=1	Audit= 0	diff	t	State=1	State=0	diff	t
Score	73.397	41.981	31.416***	18.823	44.146	39.839	4.307***	8.434
M	23.461	14.737	8.724***	15.462	15.293	14.223	1.070***	6.296
C	31.311	17.633	13.678***	15.851	18.623	16.615	2.008***	7.739
T	13.089	7.547	5.542***	23.814	7.794	7.409	0.386***	5.161
I	5.536	2.065	3.471***	14.258	2.436	1.595	0.841***	11.791

Note: ***, **, and * represent statistical significance at the 1%, 5% and 10% levels, respectively.

of CSR information disclosure of state-owned enterprises is higher than that of private enterprises, and the overall performance of social responsibility is better.

3.3. Regression analysis

3.3.1. CSR assurance and CSR disclosure quality

Regression is performed on sample data according to model (1), and the results are listed in Table A3 (see Appendix).

The paper uses the RKS's CSR report total score (Score) as a dependent variable for regression testing. The results in column I show that the CSR assurance (Audit) significantly positively (31.416) affects the quality of CSR information disclosure, and the significance level is 1%. This shows that a company's CSR assurance has indeed improved the quality of CSR information disclosure through supervision, restriction and proper risk assessment. Thus, this test result supports the first hypothesis of this study.

Among the control variables, the size of a company (3.574, $p < 0.01$), the board size (5.107, $p < 0.01$), and ownership rights type (1.628, $p < 0.01$) are significantly positively correlated with the quality of CSR reports, whereas the company age (-1.682, $p < 0.01$) and financial leverage (-4.726, $p < 0.01$) are significantly negatively correlated with CSR total score as assessed by RKS. This shows that, compared to small-scale companies, large-scale companies disclose better social responsibility information, the big board is more conducive to promoting corporate social responsibility, and that state-owned companies are more inclined (in effect mandated) to disclose social responsibility information than their non-state owned counterparts. On the contrary, long-time listed companies and companies experiencing

deterioration in their financial status, endure non-beneficial influence on the quality of CSR reporting as a result.

3.3.2. CSR report audit and CSR information disclosure quality

The paper uses model (2) to regress the sample. The results in column II of Table A3 (Appendix) show that the CSR report assurance (Audit) coefficient is significant (24.867) at the 1% level, which still supports the first hypothesis. However, when the major shareholder's shareholding ratio exceeds 50% and reaches absolute holding, a positive correlation between the variable FstMonitor and CSR is no longer significant. Although the coefficient of the variable FstMonitor is still positive, it is no longer significant. The coefficient of the variable Audit×FstMonitor is negative (-0.100, $p < 0.1$), which confirms that the CSR assurance is negatively correlated with the ownership concentration, that is, the degree to which the largest shareholder effectively controls the company, and is significant at the 10% level. This means that when the majority shareholder's shareholding ratio is increased to be able to effectively control the company, it will hinder and put a cap on the advancement in the quality of CSRR through its assurance. Thus, hypothesis H2 is confirmed.

4. DISCUSSION

This paper contributes to CSRR and CSRA research by analyzing these practices in China. The large sample consists of 2,292 Chinese listed firms covering the period from 2015 to 2018, which assists in generalizing the findings. The data from this study comes from among the largest listed companies on the Shanghai and

Shenzhen stock exchanges through information extricated from RKS rankings and CSMAR database.

Adopting signaling and stakeholder theories, the paper anticipates and proves that external assurance enhances the CSSR quality akin to financial reporting case. The study finds that the quality of CSRR of companies that conduct its assurance have higher sub-scores in all four aspects of RKS rating, namely macrocosm (M), content (C), technicality (T), and industry (I), compared to those that chose not to audit it. However, the paper also documents that when the ownership concentration reaches majority, it thwarts the advancement in the quality of CSRR through its assurance. The emergence of the “entrenchment effect” of major shareholders prevents companies from conducting external assurance, and thus puts small and medium shareholders into situation of being deprived of reliable information.

Overall, the results verify the signaling theory as the result is interpreted in a way congruent with signaling theory: more qualified CSR reporters merely take advantage of external assurance as a quality signal, whilst poor quality reporting is not assured (Maroun, 2019). Those findings from Chinese institutional setting are on par with conclusions reached by Maroun (2019) and Moroney et al. (2012) in South Africa and Australia, respectively. These findings (assured CSRR are of higher quality) are to be interpreted in line with signaling theory that higher CSR performers who relate themselves to either low-risk type firms (Melumad & Thoman, 1990) or high-quality firms (Connelly et al., 2011) signal their superiority over high-risk and low-quality firms. Firms, following the term of Bagnoli and Watts (2017), select a “separating equilibrium” path: incurring extra cost but displaying their superiority. Thus, the paper testifies that in the voluntary context, higher corporate social responsibility performers are more likely to assure their corporate social responsibility reports externally.

The paper contributes to the modest body of empirical research on the function of external assurance in the CSR area by explicating the role that the accounting (external assurance) and corporate

governance (ownership concentration) infrastructure plays in order to ensure high quality of CSR reporting.

Care should be taken as some caveats are to be considered when interpreting those findings. First, the sample is limited to the available data, as only the data of listed companies included in the rating system by RKS in 2015–2018 are used for testing. As a result, listed companies and non-listed companies not included in the RKS ranking system need to be further studied. Secondly, caution is advised about any interpretation of those findings as suggesting mandatory CSRA, since mere mandating without corresponding to its legal condition is futile. The beneficial impacts of CSR reporting are believed to be crucially dependent on the alignment of legal and economic incentives, which would jointly spur firms in terms of high quality of CSRR. Lastly, this study scrutinizes only Chinese companies, and thus, those findings cannot be generalized and applied to companies in other jurisdictions.

Although this paper demonstrates that external assurance on CSRR contributes to its higher quality, the exact mechanism of how and why is not ascertained yet. This provides the scope for more investigative studies, which could answer the following questions: What is the role of the external assurer in identifying weaknesses in CSRR and areas that could be addressed to improve it? Does auditing make preparers more aware of the need for complete, accurate, and balanced information? Do the CSRA and the interaction with the assurers alter a company’s attitude and approaches to the preparation, evaluation and submission of CSRR? Moreover, given the panoply of assurance providers’ types, it is advisable to compare the assurance effects of different audit subjects (something we was unable to undertake due to unavailability of corresponding data). Future research could exploit these routes for exploration to extend this lineage of the studies. Furthermore, it is believed that assured CSRR would be of higher quality in mandatory context as well, which would mean that other theories are also instrumental in explicating CSRA phenomenon. Once the mandatory context is out there, the paper urges researchers to explore the underlying relationships and pledge to follow that route as well.

CONCLUSION

This paper aims to test the effect of the external assurance on the CSRR quality in China. From the regression analysis of the data, followed by robustness tests, the following conclusions could be drawn. First, the results indicate that CSRA contributes to the higher quality of CSRR. Moreover, the study finds out that CSRR of companies that conduct its assurance have higher sub-scores in all four aspects of RKS rating, namely macrocosm (M), content (C), technicality (T), and industry (I), than those of companies that do not. However, when the major shareholder's holding ratio exceeds 50% and reaches majority, it will hinder and put a cap on the advancement in the quality of CSRR through its assurance.

Thus, in the Chinese institutional setting, external assurance improves the quality of CSR reporting. Nevertheless, external assurance combined with excessive concentration of ownership accompanied by an 'entrenchment effect' ceases to deliver a positive effect on the quality of CSRR. Thus, local and international regulatory authorities and the business community should emphasize both the significance of external assurance for CSR reporting quality and reasonable concentration of ownership, since the paper's evidence show that the 'entrenchment effect' blocks positive impulses produced by external assurance.

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APPENDIX A

Table A1. Prior studies on the effect of CSRA on CSRR quality*

Authors	Dependent variables	Independent variables	Sample	Main findings
(Koseoglu et al., 2021)	Cost of Debt Capital (COD)	Mandatory assurance of CSR Big 4 accounting firms	803 companies listed on the Taiwan Stock Exchange and the Taipei Exchange between 2010 and 2018	Mandating the assurance of CSR reports tended to decrease the cost of debt capital No significant impact
(Steindl, 2021)	The culture of a country	Credibility of CSR reporting indirectly by legal institutions Credibility of CSR reporting directly	All GRI reports included into GRI Sustainability Disclosure Database (GRI SDD) years 2012-2016	Cultural rule orientation shapes firms' tendencies toward credible CSR reporting indirectly by legal institutions Cultural rule attitude influences the credibility of CSR reports directly
(Moalla et al., 2020)	Environmental reporting quality	Environmental assurance	Listed companies from France indexed in SBF120 for the period 2012–2017	Significant positive association
(Du & Wu, 2019)	CSR-related misconduct	CSR assurance	6,289 firms on Taiwan Stock Exchange (TWSE) from 2005 to 2013	External assurance can strengthen the credibility of CSR reports
(Maroun, 2019)	Quality of integrated report	CSR assurance Reasonable assurance Big Four audit	50 listed companies on the Johannesburg Stock Exchange (JSE) (South Africa) from 2010 to 2016	Assured CSR is of better quality No significant association The Big four audit is associated with better quality of integrated reporting
(Birkey et al., 2016)	Environmental reputation of a company	CSR assurance Assurance provider type	351 observations with firms listed on the Newsweek ranking lists and having KLD CSR ratings of 2009 and 2010	Positive significant association Positive relationship between assurance and environmental reputation sustain, irrespective of assurer type
(Moroney et al., 2012)	The quality of voluntary environmental disclosures	Environmental assurance Assurance by professional accountant	74 firm-year observations out of 500 public companies listed on the Australian Securities Exchange (ASX) from 2003 and 2007	Assured companies ranking higher than unassured companies on the environmental index No significant association
(Hodge et al., 2009)	Confidence in, and credibility of the sustainability report	Assurance of SR Level of Assurance Type of assurance practitioner	145 students enrolled in an MBA program at two large Australian universities	The provision of an assurance statement with a sustainability report generates greater credibility in the report from users perspective No significant association Public accounting firm having (as opposed by a specialist consultant) a more positive impact on report users' confidence in the sustainability report

Note: * compiled by the authors.

Table A2. Description of variables used in the study

Variable name	Mnemonics	Role	Operationalization	Unit
CSR reporting quality	Score	Dependent	Runlin Global's Rankings rating or Runling CSR Ratings produced by Rankins (RKS) Inc.	Number
CSR assurance	Audit	Independent	CSR audit report, the company has audited and assigned the value of 1, otherwise it is 0	Dummy variable
Ownership concentration	Fstmonitor	Independent	Ratio of shareholding ratio between the largest shareholder and the second largest shareholder	Ratio
Firm size	Size	Control	Enterprise size, natural logarithm of total enterprise assets	Natural logarithm
Firm age	Age	Control	The age of the company, the natural logarithm of the company's time to market	Natural logarithm

Table A2 (cont.). Description of variables used in the study

Variable name	Mnemonics	Role	Operationalization	Unit
Leverage	Lev	Control	Corporate debt ratio, the ratio of total responsibility to total assets	Ratio
Return on assets	ROA	Control	Profitability of the company's total assets, the ratio of net profit to total assets	Ratio
Corporate growth	Growth	Control	Corporate growth, corporate operating income growth rate	Per cent
Ownership rights type	State	Control	Nature of property rights, the actual controller is a state-owned enterprise, assign a value of 1, otherwise 0	Dummy variable
Board size	Board	Control	Board size, natural logarithm of the number of board members	Natural logarithm
Year	Year	Control	Annual dummy variable, which belongs to a certain year and takes the value 1, otherwise 0	Dummy variable
Industry	Ind	Control	Industry dummy variable, which belongs to a certain industry and takes the value 1, otherwise 0	Dummy variable

Table A3. Regression analysis

Variables	(I)		(II)	
	Score		Score	
Audit	31.416*** (21.97)	24.863*** (22.32)	24.867*** (22.29)	25.656*** (20.30)
FstMonitor			0.005 (0.43)	0.006 (0.50)
Audit×FstMonitor				−0.100* (−1.87)
Size		3.574*** (19.47)	3.583*** (19.50)	3.571*** (19.35)
Age		−1.682*** (−4.07)	−1.684*** (−4.08)	−1.685*** (−4.08)
Lev		−4.726*** (−3.68)	−4.762*** (−3.71)	−4.745*** (−3.70)
Roa		−0.437 (−0.12)	−0.403 (−0.11)	−0.349 (−0.10)
Growth		0.220 (0.68)	0.225 (0.70)	0.223 (0.69)
Board		5.107*** (5.29)	5.125*** (5.29)	5.119*** (5.29)
State		1.628*** (3.73)	1.591*** (3.57)	1.599*** (3.59)
Constant	41.981*** (179.03)	−47.102*** (−11.00)	−47.351*** (−10.99)	−47.100*** (−10.89)
Observations	2,292	2,292	2,292	2,292
R-squared	0.134	0.324	0.324	0.324
F test	0	0	0	0
r ² _a	0.134	0.322	0.322	0.322
F	482.7	213.4	189.5	173.9

Note: Robust *t*-statistics in parentheses. *** $p < 0.01$, ** $p < 0.05$, and * $p < 0.1$.