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# Article

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# Can CSR Engagement and Strong Internal Control Enhance Sustainable Corporate Growth? Evidence from Chinese Listed Companies

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# Abstract

Adopting agency theory and stakeholder theory, the paper examines the relationship between corporate social responsibility (CSR) and the strength of internal control (IC) alone, as well as combined on the sustainable corporate growth of Chinese listed companies. By examining through regression analysis using Stata16 the sample of 17,294 firm-year observations of China's A-share listed companies over the period 2010 to 2018, we show that CSR and IC are both beneficial to companies' sustainable growth. The findings manifest a significant association, both in the event of separate testing of the two

factors (CSR and IC) and in the case of the coupled effect thereof, on sustainable corporate growth (SCG). We show that CSR and IC allow harmonizing actual growth with internal resources available and that CSR and IC both enhance the company's sustainable growth rate. We document that CSR and IC increase the threshold enabling companies to grow internally without resorting to further use of sparse limited resources. We argue that the CSR and IC can realize the interactive influence on the sustainable growth of the enterprise, and then produce the synergy effect. As a whole, our findings supply a novel implication that the extent of CSR and IC can enhance sustainable corporate growth.

**Keywords:** corporate social responsibility, internal control, sustainable corporate growth, sustainable company growth, Chinese listed companies.

#### 1. Introduction

Over the past few decades, due to growing awareness and increasingly more pressure from stakeholders, more and more companies are beginning to engage in social and environmental practices (Shahbaz et al., 2020). KPMG in the latest survey found that the corporate social responsibility (CSR) reporting rate worldwide in 2020 is about 80% compared with just 53% in 2008 (KPMG, 2020). It is argued that companies might shrewdly and premeditatedly utilize their activities on CSR, which implies their moral obligations to advance the welfare of society within the bounds of their business operations, to enhance its financial performance (Nyame-Asiamah & Ghulam, 2019). However, CSR can bring about not only traditional economic outcomes but also other desirable for firms outcomes (Lee & Lee, 2019), which few studies so far have ventured to investigate. Thus, our study seeks to determine whether active participation in CSR leads to enhanced sustainable corporate growth of firms. Moreover, alongside CSR we examine how the strength of internal control and sustainable corporate growth relate. Therefore, we embark to examine basically how CSR is instrumental for sustainable development on the ground, on a firm's level.

The concept of sustainable development is believed to have drawn broad-based, multi- and interdisciplinary attention than other development concepts lack (Mensah, 2019). That complexity and vast coverage, on the one hand, is commendable, at the same time it makes the endeavor to come to a unified definition of the phenomenon a way harder if achievable at all. A clear definition of this concept is needed if we are to "move beyond the sustainability rhetoric and to pursue an actual search for sustainable development" (Giovannoni & Fabietti, 2013). No matter how debatable the concept of sustainable development is as Giovannoni and Fabietti highlight within the debate on sustainability environmental, social and business discourses can be clearly identified (Giovannoni & Fabietti, 2013). A cursory analysis of the literature shows that preference is mostly given to the first two discourses, while the latter has not gained such popularity. Business discourses within sustainable development are in no way less significant than the other two because due to the exhaustion of natural resources as a consequence of their activities, corporations must proceed towards a state in which they use merely resources that are depleted at a rate below the natural reproduction, or at a rate below the development of substitutes (Dyllick & Hockerts, 2002). The abovementioned situation entails not only ecoefficiency but also eco-effectiveness and sufficiency (Giovannoni & Fabietti, 2013). And

here sustainable corporate growth comes into play a term and concept that in our opinion is undeservedly rejected on the periphery of sustainable development.

As Patel et al. (2020) note sustainable growth is a product that is guided by the competitive processes and therefore is regarded as a proxy of resource and capability efficacy, thus, it is by and large an authentic yardstick of the magnitude to which the resources of a company are efficaciously coordinated with the environment (Patel et al., 2020). A sustainable corporate growth rate is the highest attainable growth rate of a firm and which can be reached pursuant to their financial, operational, managerial conditions and policies (Fonseka et al., 2012). So, a company may only grow faster than its sustainable growth rate is a firm's long-term target growth rate (Patel et al., 2020).

Sustainable corporate growth is anchored in the idea that actual growth is harmonized with internal resources, therefore faster growth would levy the limited asset base while not fast enough growth could curb the confidence of investors and stakeholders and generate missed chances (Patel et al., 2020). In the frame of the field of business finance, sustainable growth epitomizes the maximum rate at which a firm can extend its sales or revenues without exhausting its financial wherewithal (Escalante et al., 2009; Higgins, 2003). At the same time, from the point of view of sustainable development, sustainable growth can be considered from the point of view of resources depletion, because financial resources often entail material resources (Mamilla, 2019; Patel et al., 2020).

For companies to survive in a competitive world sustainable growth is required (Mamilla, 2019). However, sustainable growth is also crucial for society as a whole in terms of sustainable development. That is, a win-win situation is created here when the company grows and at the same time does not take more resources from society, community, etc. you name it. Sustainable growth means growth occurs with no rise in assets, equity emission, extra liabilities, or retained earnings (Mamilla, 2019). Sustainable growth is also a great tool for investors and analysts to ascertain the highest possible rate at which the firm can grow by means of existing assets (Mamilla 2019).

Prior studies have concentrated on various aspects of sustainable corporate growth like understanding the economic setting and business choices made by farmers in specific moments of the period (Escalante et al., 2009), on reviewing discrepancies in legal and financial systems that affect companies' approach to use of outside finance to fund growth (Demirgüç-Kunt & Maksimovic, 1998), to produce and construct a decision-making process related to macro marketing (Jarvis et al., 1992), to evaluate the achievability of the growth plans in bank sector (Vasiliou & Karkazis, 2002), to examine the association between disclosure quality at firm-level and accessibility of external financing to an organization (Hyytinen & Pajarinen, 2005), to investigate the actual growth rate as well as to study the comprehensive effect of picked independent variables on sustainable corporate growth rate (Mamilla, 2019). Although these scholars have demonstrated the practical impact and significance of SCG to various directions of inquiry, it manifests that research on this topic is scanty, especially in terms of how corporate social responsibility and the strength of internal control affect sustainable corporate growth (SCG).

In the light of the foregoing, we were attracted by the idea of examining whether corporate social responsibility (CSR) and the strength of internal control (IC) affect alone, as well as together the sustainable corporate growth. To fill this gap, therefore, we conduct a study the findings of which should respond to the following research questions:

- ➢ How does corporate social responsibility affect the company's sustainable growth?
- ▶ How does the strength of internal control affect the company's sustainable growth?
- Whether corporate social responsibility and the strength of internal control combined exerting an effect on a company's sustainable growth?

Using a sample of 17,294 firm-year observations of China's A-share listed companies over the period 2010 to 2018, we examine the cross-sectional relation between CSR, the strength of IC and SCG.

We identify a significantly positive relation between CSR and SCG. We find that socially responsible firms fare better in SCG. The same holds for the relationship between IC and SCG. We further examine the combined effects of CSR and IC on SCG and find that CSR and IC exerting a synergistic effect on SCG. We show that due to CSR and IC the resources base of a firm what "effectively matched with the environment" (Patel et al. 2020, 80) increases allowing economic growth without harm to the environment and limiting the insatiable consumption of external resources, strengthening instead the use of existing resources. We show that CSR and IC allow harmonizing actual growth with internal resources available and that CSR and IC both enhance the company's sustainable growth rate. We document that CSR and IC increase that threshold enabling companies to grow internally without resorting to further use of sparse limited resources.

As a whole, our study contributes to this thread of literature by documenting that CSRoriented firms with strong internal control can harmonize their actual growth with internal resources and grow internally without resorting to further use of sparse limited resources. We contribute to this debate by documenting that firms that engage in CSR and can boast strong IC have a higher threshold of sustainable corporate growth. As a whole, our findings supply a novel implication that the extent of CSR and IC can enhance sustainable corporate growth.

The next sections of this paper are arranged in the following way. Section 2 presents the theoretical framework and hypotheses development. Section 3 outlines the research design including sample selection procedures, depicts all variables, measurements and empirical models this study employs. Section 4 presents the empirical results and provides a detailed analysis of results, and finally, section 5 summarizes the results, draws conclusions, indicates research's limitations and propose avenues for future studies.

#### 2. Theoretical Framework and Hypotheses Development

#### 2.1. Theoretical Framework

The theoretical basis of our study forms agency, legitimacy, stakeholders and institutional theories (Table 1).

Theory	Explanation				
Agency theory	Therefore, prior literature recognizes the extent of agency conflicts (type 1: between shareholders and managers and type 2: between controlling and minority shareholders) as the main source of demand for more disclosures. According to the basics principles of agency theory, the disclosure of information other than financial might compensate for the inability of outside shareholders to follow the actions of insiders (managers) directly and, thus, lessen the principal- agent problem. CSR can lead to a reduction in agency costs and through it to enhanced performance (Greiner & Sun, 2021).				
Legitimacy theory	Companies are obliged by a 'social contract' in which they consent to discharge various socially desired activities in exchange for the endorsement of their objectives and other benefits, and this essentially safeguards their survival. Accordingly, firms engage in CSR seeking to legitimize their role within society.				
Stakeholder theory	Stakeholder theory postulates that firms are part and parcel of a broader social structure in which their businesses affect, and are affected by, other stakeholder groups within society. Accordingly, firms act following what their stakeholders require. Because of this point, stakeholder coercion is likely to influence the CSR engagement of the firm and its sustainable corporate growth.				
Institutional theory	Even if the companies have no clear market incentives to engage in CSR, it might anyway determine to undertake this route due to regulation or social pressure, thus producing divergence among jurisdictions as a result of varying demand for sustainability in different countries. The institutional settings the firms operate in, therefore, ought to be considered as well when exploring sustainability.				

Table 1: The Theories behind the Study's Hypotheses Development

We note, that it seems to us that only the first theory postulates the 'action-effect' approach, while the other three theories are either seen as coercion (legitimacy and stakeholders) or as a given of being in a certain environment (institutional theory). The agency theory presupposes that CSR engagement (action) leads to an increase in the amount of information about the company available to stakeholders, this reduces the level of information asymmetry, decreases the level of opportunistic actions of managers and leads to an increase in the corporate sustainable growth (effect).

# 2.2. Corporate Social Responsibility and Sustainable Corporate Growth

It is believed that corporate social responsibility affects corporate sustainable growth directly and indirectly. First of all, CSR promotes closer involvement of stakeholders and facilitates the change of management's mindset and also contributes to more efficient use of resources.

There are two ways CSR is expected to extend the threshold of sustainable corporate growth: 1) through the mechanisms of downside risk reduction and 2) due to upside efficiency enhancement (Lu et al., 2021). Lu et al. suggest and prove that CSR can generate a market premium employing the processes of downside risk reduction or upside efficiency enhancement (Lu et al., 2021).

#### 2.2.1. Downside Risk and CSR

CSR can be applied by companies as a tool in the strategy of a firm's risk-reduction (Jo & Na, 2012; Lu et al., 2021; Luo & Bhattacharya, 2009). In terms of risk management and from this standpoint, effective stakeholder management nurtured within CSR does not only produces favorable reputational capital (Godfrey, 2005; Kim et al., 2021) but also assists in the enhancement of the practices of risk management (Jo & Na, 2012; Lu et al., 2020). This has been proved to affect both the likelihood of risk ex-ante (Koh et al., 2014; Mayberry, 2020) as well as the harshness and acuteness of losses ex-post (Jia et al., 2020; Shiu & Yang, 2017).

Corporate social performance can raise firm value through operating as an insurance instrument, although its value-raising consequences diverge contingent on a firm's litigation exposure (Koh et al., 2014). Moreover, companies having a long-term dedication to CSR are more likely to amass decent moral capital to produce insurance-like effects in case of damaging incidents occurrence (Shiu & Yang, 2017). Lu, Liu, and Falkenberg results suggest that overall, firms that excelled in CSR are more likely to establish integrated risk management practices and CSR activities focusing both on principal stakeholders and secondary stakeholders are identically crucial in assisting of the endorsement of such risk management practices (Lu et al., 2020).

So, from this perspective, CSR can simulate or operate as loss control and hence minimize anticipated losses (through lessening the consequences of unfavorable incidents), the cost of loss financing (through diminishing the likelihood of financial trouble) and the cost of residual uncertainty (through facilitation of improved provisions of deal with stakeholders) (Lu et al., 2021).

Lu et al. provide an example of a chemical firm that decides to switch to the use of nontoxic materials for its products (Lu et al., 2021). This simple step may decrease the probability of environmental prosecution (thereby minimizing expected loss) and strengthen and boost customer loyalty (thereby decreasing residual uncertainty), and consequently reducing the necessity to keep tied a certain amount of money in form of internal loss reserves or insurance (thus reducing the cost of loss financing) (Lu et al., 2021).

However, it should also be borne in mind that reducing the risk does not always lead to an increase in the value of the company, besides, to calculate the net effect, one must also take into account the amount of investment in risk mitigation. At the same time, this strategy works well in the case of high-risk companies. Those kinds of companies, therefore have a larger demand to spend on risk mitigation measures since they are more likely to gain from risk mitigation (Lu et al., 2021). Risk context matters here. Thus, in the case of high-risk companies, investors will probably perceive a high level of CSR engagement as an appropriate effort towards risk reduction and respond positively, whereas low CSR

engagement combined with a high-risk setting will be construed by investors as inadequate risk lowering endeavor, which leads to disproportionate risk exposure (Lu et al., 2020, 2021; Shiu & Yang, 2017).

Lu et al. (2021) have developed the theoretical model of how investors distinguish the usefulness of CSR performance under various risk contexts which we provide here as figure 1.

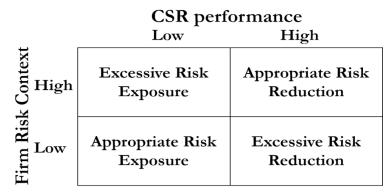


Figure 1: Firm Risk Context and CSR Performance (Lu et al., 2021)

2.2.2. Upside potential and CSR. CSR can be regarded as a vehicle for intensifying the upside potential of the company by rising internal and external efficiency through building strong stakeholder trust (Hillman & Keim, 2001; Jiang et al., 2020; Lu et al., 2021), differentiating it from its rivals (Ben-Amar et al., 2021; McWilliams & Siegel, 2001), reducing transaction costs (Lu et al., 2021), and improving operational efficiency (Flammer, 2018; Lu et al., 2020).

CSR is also recognized as one of the tools of effective differentiation tactics firms employ (Lu et al., 2021; McWilliams & Siegel, 2001) and is a common non-market strategy deployed by companies (Baron, 2001; Baron & Diermeier, 2007; "Firm Improvements," 2019).

At the same time, it should be noted that such effects do not always lead to value creation, as it is also necessary to take into account the invested capital related to CSR as well as the opportunity costs of invested capital. Therefore Lu et al. make a verdict that investors will acknowledge high CSR performance favorably provided that the benefits from CSR surpass the costs of attaining such high CSR performance (Lu et al., 2021).

We argue following (Lu et al., 2021) that level of earning capabilities acts as a litmus test of investors' reaction. When a company shows high earning capabilities it is capable to transform high CSR performance into value and be perceived by investors positively, whereas firms showing low earning capabilities "achieving high CSR performance will be perceived as value-destroying" (Lu et al., 2021).

Fig. 2 represents the theoretical framework developed by (Lu et al., 2021) which helps us to theorize how investors distinguish the serviceability of CSR performance contingent on a firm's earning capabilities (Lu et al., 2021).

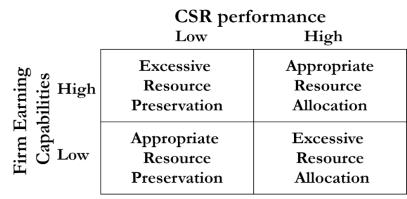


Figure 2: Earning Capabilities and CSR Performance (Lu et al., 2021)

Taken together, we argue that CSR through the risk-reduction and intensifying upside potential of the company is going positively affect sustainable corporate growth.

Thus, we formulate our first hypothesis as follows:

➢ H₁: The fulfilment of corporate social responsibility enhances the company's sustainable growth.

# 2.3. The Strength of Internal Control and Sustainable Corporate Growth

There are several frameworks of internal control developed, such as CoCo applied in Canada and that of the King report in South Africa (Länsiluoto et al., 2016). However, since the majority of companies utilize COSO (COSO, 1992) as the basis for the evaluation of internal control (Klamm & Watson, 2009) we look into it deeper.

The framework regards internal control as a system of resources, systems, processes, culture and structure that supports people in achieving objectives in the following three areas (Länsiluoto et al., 2016).

1	<b>EFFECTIVENESS AND EFFICIENCY OF OPERATIONS</b> the effectiveness and efficiency of operations by enabling firms to respond appropriately to risks, and accomplish performance and profitability goals, and safeguard resources against loss
	RELIABILITY OF FINANCIAL REPORTING
2	the preparation of reliable financial statements, including procedures

for reporting any control weaknesses with corrective actions

	COMPLIANCE WITH APPLICABLE LAWS AND
3	REGULATIONS
	adherence to the laws and regulations, the organization is subject to

# Figure 3: Three Areas of Internal Control According to the Committee of Sponsoring Organization of Treadway Commission (COSO, 1992)

The COSO framework besides presupposes the presence and operations of five elements that perform an essential function in the accomplishment of a firm's internal control goals. These are 1) control environment, 2) control activities 3) risk assessment, 4) information and communication 5) monitoring (COSO, 1992; Länsiluoto et al., 2016).

Thus, internal control plausibly ensures the efficacy of business operations, credibility and trustworthiness of financial reporting and observation of laws and regulations, and eases the conflict of interest resulting from the disequilibrium of the governing frame (Länsiluoto et al., 2016; Li et al., 2018; Liu, 2018). Internal control considered as a whole of those mentioned procedures is believed to optimize the efficiency of capital allocation and promotes the sustainable development of enterprises (Li et al., 2018; Liu, 2018).

Li et al. add that in the case when the internal governance is well established, power supervision and the governance vs. management balances are in place, the company will assume full social responsibility (Li et al., 2018).

However, the major risk to internal control itself is the risk of fraud (Li et al., 2018), for the deprivation of control of social responsibility risk will seriously hamper the sustainable development of the firm (Hediger, 2010).

Moreover, it is believed that internal control fills the gap felt by the absence of engagement in CSR (Li et al., 2018), although this is more pertaining to our third hypothesis.

Based on the above mentioned analysis, the following hypothesis is proposed.

H<sub>2</sub>: The strength of internal control of a company is positively correlated with the level of sustainable corporate growth.

# 2.4. Corporate Social Responsibility and Internal Control Combined Impact on Sustainable Corporate Growth

CSR and IC are related as many functions they perform overlapped and thus internal control is closely related to the fulfilment of corporate social responsibility (Huang et al., 2018; Li et al., 2018; Pasko et al., 2021). Moreover, internal control compensates for the absence of corporate social responsibility and is instrumental in managing the quality of disclosures concerning social responsibility (Li et al., 2018). Furthermore, it is a significant function of internal control to supervise the fulfilment of corporate social responsibility and preserve the legitimate rights and interests of stakeholders (Hediger, 2010; McWilliams & Siegel, 2000).

Based on the abovementioned logic, we propose the following third hypothesis.

H3: Corporate social responsibility and the strength of internal control combined exerting an effect on sustainable corporate growth

Figure 4 depicts a methodological construct of the study, describing the hypothesized relationship and the research stages implemented.

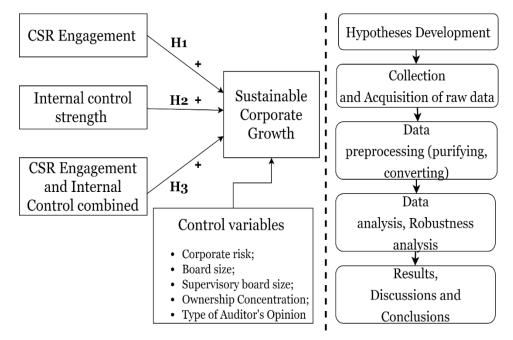


Figure 4: Model of the Hypothesized Relationship between the Study Variables (Left) and Implementation Phases of the Research Process (Right)

# 3. Research Design

#### 3.1 Data Selection and Sampling

We drew on the entire population of China's A-share listed companies from 2010 to 2018. We screened the samples as follows: financial and insurance listed companies are

eliminated; observation samples with missing relevant data and indicator values are eliminated; observation samples with abnormal relevant data and indicators are eliminated. Finally, 17,294 sample observations are obtained. The sample selection procedure is given in table 2.

Steps	Explanation	Observations
1	A - share listed companies on China's Shanghai and Shenzhen stock, period 2010 - 2018	25146
2	Less: the financial industry companies	689
3	Less: *ST companies	1176
4	Less: ST companies	689
5	Less: companies with missing data	5298
6	Final sample	17294

**Table 2: Sample Selection Procedure** 

\* - When a company has suffered losses for two consecutive years or its net assets are lower than the par value of the stock, "ST" will be added before the stock name, which means "special treatment", and the daily rise and fall shall not exceed 5%. Used to warn investors to pay attention to investment risks. If In the third year, the company's operations have not improved and it is still in a state of loss, in addition to the "ST" before the stock name, "\*" will be added, which means delisting risk.

Financial data comes from WIND database; corporate governance and other related data come from China Stock Market & Accounting Research (CSMAR) database; Hexun's CSR rating comes from Hexun database, while the internal control index comes from DIB database. The paper resorts to multiple regression and uses statistical software STATA 16.0 for data analysis.

3.2 Variables and Measures

#### 3.2.1 Corporate Sustainable Growth

As a proxy for CSG, we used modified Van Horn's static sustainable development model (Zhou & Cheng, 2002). Given that the performance sustainable growth model can measure whether listed companies have long-term profitability and lasting competitive advantage, considering also that the research in this article is based on static panel data, therefore, according to Van Horn's static sustainable development model, the sustainable development index of the enterprise is constructed and the sustainable development ability of listed companies is measured.

#### 3.2.2 Corporate Social Responsibility

We use the professional evaluation system of listed company social responsibility reports in the Hexun database as a proxy for the level of corporate social responsibility. Hexun's CSR rating (hereafter referred to as HX) is used to assess a firm's CSR performance based

on numerous stakeholder dimensions and is believed to be the most widely accepted CSR measurement criteria in China (Albuquerque et al., 2019). This evaluation system examines the five aspects of responsibility towards 1) shareholder, 2) employee, 3) customer and supplier, 4) environment and 5) society. The larger the value, the higher the level of CSR performance.

# 3.2.3 Internal Control

As a proxy for the strength of internal control, we utilize the internal control index by DIB database which is purposefully designed to assess the phenomenon of the same name. The internal control index data in DIB database is mainly derived from the financial data, non-financial information and internal control self-evaluation reports in the annual reports of listed companies, which can more comprehensively and accurately reflect the effectiveness of the internal control of listed companies. Therefore, this article selects the internal control index in the DIB database as a substitute variable for the strength of internal control.

Risk always runs through the process of creating value for stakeholders, when a company faces high operating risks, existing stakeholders and potential stakeholders are not necessarily willing to exchange the resources they have with the enterprise. This will weaken the resource base for the sustainable development of the company. Therefore, this paper incorporates corporate risk into the model as control variables. Corporate governance plays an important role in protecting the rights and interests of stakeholders. Therefore, the paper chooses the board size, the board of supervisor's size, and the ownership concentration as relevant variables of corporate governance. Previous studies have shown that audit opinions are useful for decision-making and can provide stakeholders with useful information for decision-making. Therefore, this article embeds audit opinions into the model as control variables as well.

The definitions and calculation methods of all variables are shown in Table 3.

Name of Variable	Role	Operationalization	Unit	Source
Sustainable Corporate Growth (CSD)	Dependent	Sustainable corporate growth = net sales interest rate × earnings retention rate × (1 + equity ratio) / [1 / total asset turnover rate - net sales interest rate × earnings retention rate × (1 + equity ratio)]	ratio	WIND
Corporate Social Responsibility (CSR)	Independent	Hexun's CSR rating	number	Hexun's CSR rating
Internal Control (IC)	Independent	DIB Internal Control Index	number	DIB Internal Control Index
Corporate Risk (RISK)	Control	(net profit + income tax expense + financial expense + depreciation of fixed assets, depreciation of oil and gas assets, depreciation of productive biological assets + amortization of intangible assets + amortization of long- term deferred expenses) / (net profit + income tax expense)	ratio	WIND
Board Size (BOARD)	Control	Total number of board directors	number	CSMAR
Supervisory Board Size (SPVBOARD)	Control	Total number of supervisors on the board of supervisors	number	CSMAR
Ownership Concentration (OWNCON)	Control	The share of the largest shareholder in the total share capital	per cent	CSMAR
Audit Opinions (AUDIT)	Control	Whether the auditor's opinion on the financial report is an unqualified one, if yes, take 1, if not take 0	dummy variables	WIND

Table 3: Description	of the	Variables	Used in	the Study

#### 3.3 Empirical Model

The paper designs model (1) to test hypothesis 1, that is, to test the impact of corporate social responsibility on sustainable corporate growth. Model (2) is designed to test hypothesis 2, that is, to test the impact of the strength of the enterprise's internal control on sustainable corporate growth. Based on model (1) and model (2), the cross-product construction model (3) was incorporated into the corporate social responsibility and the corporate internal control, and the cross-product was standardized before being incorporated into the model. Model (3) is used to test whether the level of corporate social responsibility and the strength of corporate internal control have a synergistic effect, which will then have an interactive impact on the sustainable growth of the company.

$CSD = \beta_0 + \beta_1 CSR + \sum \beta_i control + \varepsilon$	(1)
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$CSD = \alpha_0 + \alpha_1 IC + \sum \alpha_i control + \varepsilon$	(2)
--	-----

$$CSD = \gamma_0 + \gamma_1 CSR + \gamma_2 IC + \gamma_3 CSR \times IC + \sum \gamma_i control + \varepsilon$$
(3)

# 4. Data Analysis and Results

4.1 Descriptive Statistics

Table 4 lists the descriptive statistical characteristics of the main variables.

VARIABLES	Ν	Mean	SD	Min	Max
CSD	17,294	0.0808	0.176	-10.39	6.177
CSR	17,294	28.38	16.30	-6.520	90.83
IC	17,294	672.6	75.25	40.04	995.4
RISK	17,294	2.490	8.084	-559.0	374.8
BOARD	17,294	8.715	1.744	0	18
SPVBOARD	17,294	3.621	1.132	1	13
OWNCON	17,294	0.358	0.152	0.00286	0.891
AUDIT	17,294	0.989	0.105	0	1

**Table 4: Descriptive Statistics** 

Notably, that in all 17,294 observation samples, the mean value of corporate sustainable growth is 0.0808, the standard deviation is 0.176, the minimum value is -10.39, and the maximum value is 6.177, which shows that the level of SCG of sample companies are generally low, and there is a lot of scope for improvement.

In the above table, we also note that the average value of CSR is 28.38, the standard deviation is 16.30, the minimum is -6.520, and the maximum is 90.83. This indicates that the overall level of CSR of the sample companies is not high, and there are certain differences between individual companies.

The average value of internal control is 672.6, the minimum is 40.04, and the maximum is 995.4, indicating that the overall internal control quality of the sample companies after the

implementation of the "Basic Standards for Enterprise Internal Control" is relatively good, but the internal control quality of individual listed companies needs to be further improved.

# 4.2 Correlation Analysis

Table 5 shows the correlation test results of the main variables. The correlation coefficient between the main variables does not exceed 0.5, indicating that there is no serious multicollinearity problem in model (1), model (2) and model (3). At the same time, the correlation coefficient between corporate social responsibility and corporate sustainable growth is 0.090, which is significant at the 1% level, and the correlation coefficient for internal control is 0.111, which is significant at the 1% level. This shows that there is a positive correlation between corporate social responsibility, internal control and corporate sustainable growth. Thus, hypothesis 1 and hypothesis 2 are likely to be verified.

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	CSD	CSR	IC	RISK	BOAR D	SPVB OARD	OWNC ON	AUD IT
CSD	1							
CSR	0.090 ***	1						
IC	0.111 ***	0.284 ***	1					
RISK	-0.053 ***	-0.078 ***	-0.039 ***	1				
BOARD	0.021 ***	0.145 ***	0.098 ***	0.037 ***	1			
SPVBOA RD	0.016 **	0.130 ***	0.071 ***	0.044 ***	0.351 ***	1		
OWNCO N	0.038 ***	0.117 ***	0.121 ***	-0.009	0.024 ***	0.093 ***	1	
AUDIT	0.00800	0.058 ***	0.165 ***	-0.021 ***	-0.0040	0.0010	0.041 ***	1

**Table 5: Correlation Analysis** 

Robust t-statistics in parentheses: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1

# 4.3 Regression Analysis

Table 6 shows the results obtained for the three models proposed for testing our hypotheses. In the regression results of the model (1) in Table 6, the corporate social responsibility coefficient is 0.001, and it is significantly correlated at the 1% level, indicating that there is a significant positive correlation between corporate social responsibility performance and the level of SCG. Corporate social responsibility can improve its level of SCG, hypothesis 1 has been verified. Regarding the control variables, there is a significant

negative correlation between corporate risk and SCG, and a significant positive correlation between equity concentration and SCG, indicating that listed companies with low corporate risk and high equity concentration have better prospects for sustainable development.

	Model (1)	Model (2)	Model (3)
VARIABLES	CSD	CSD	CSD
CSR	0.001***		-0.002**
	(13.59)		(-2.27)
IC		0.000***	0.000***
		(10.36)	(2.71)
$IC \times CSR$			0.000***
			(3.18)
RISK	-0.001***	-0.001***	-0.001***
	(-2.88)	(-2.92)	(-2.89)
BOARD	0.001	0.001	0.000
	(1.08)	(1.07)	(0.35)
SPVBOARD	0.000	0.001	0.000
	(0.27)	(0.77)	(0.02)
OWNCON	0.032***	0.028***	0.023***
	(4.23)	(3.63)	(2.99)
AUDIT	0.002	-0.019	-0.015
	(0.08)	(-0.62)	(-0.50)
Constant	0.035	-0.088***	-0.012
	(1.09)	(-2.60)	(-0.29)
Observations	17,294	17,294	17,294
R-squared	0.011	0.016	0.019
F test	0	0	0
r2_a	0.0107	0.0153	0.0188
F	42.53	27.47	47.43

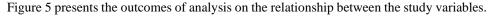
Table 6:	Regression	Analysis
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Robust t-statistics in parentheses: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

In the regression result of the model (2), the internal control coefficient is 0.000, and it is significantly positively correlated at the 1% level, indicating that listed companies can improve their sustainable development level by tightening the strength of internal control. Thus, hypothesis 2 has been verified. Regarding the control variables, there is a significant

positive correlation between equity concentration and the level of SCG, and a significant negative correlation between corporate risk and corporate sustainable development, which is consistent with the regression results of the model (1).

In the regression result of model (3), the CSR coefficient is -0.002, and it is significantly negatively correlated at the 5% level, indicating that CSR is not conducive to the sustainable development of the company. Contrary to the regression results of model (1), outcomes of the model (3) intended to ascertain the combined effect of CSR and IC don't support the assumption made by us in the first hypothesis. The internal control coefficient is 0.000, which is significantly positively correlated at the 1% level, indicating that the internal control and the sustainable development level of the company are significantly positively correlated, which further confirms the regression results of the model (2). At the same time, the coefficient of the interaction between CSR and internal control is 0.000 and is significant at the 1% level, indicating that there is a synergistic effect between CSR performance and internal control quality, which has a significant positive interactive impact on SCG of the company. That result paves the way for us to pronounce that hypothesis 3 is confirmed. The regression results of related control variables are consistent with models (1) and (2). The coefficient of corporate risk is -0.001, which is significantly negatively correlated at the 1% level. The coefficient of equity concentration is 0.023, which is significantly positively correlated at the 1% level.



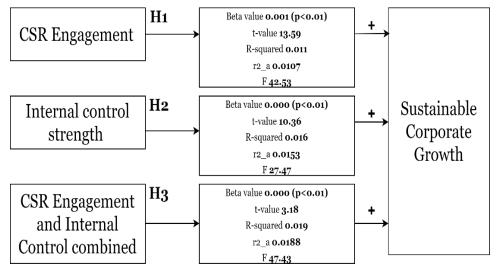


Figure 5: Regression Model's Outcomes on the Relationship between the Study Variables

# 4.4 Robustness Test

To test the robustness of the empirical analysis, first of all, this article tests samples correlation between the social responsibility reports of Hexun listed companies and the

Rankins CSR Ratings Index. The results show that the two indicators are significantly positively correlated at the 1% level. Second, to ensure our empirical testing sustains in various combinations, we take the natural logarithm of the internal control index and replace the internal control index in the original model. We observe (Table 7) that the regression result is the same as the previous, which proves that the regression result of this article is relatively robust.

	Model (2)	Model (3)
VARIABLES	CSD	CSD
CSR		-0.020***
		(-4.73)
LNIC	0.109***	0.010*
	(7.72)	(0.42)
$LNIC \times CSR$		0.003***
		(4.90)
RISK	-0.001***	-0.001***
	(-2.91)	(-2.88)
BOARD	0.001	0.000
	(1.46)	(0.50)
SPVBOARD	0.001	0.000
	(1.10)	(0.13)
OWNCON	0.033***	0.026***
	(4.26)	(3.36)
AUDIT	-0.014	-0.010
	(-0.45)	(-0.31)
Constant	-0.639***	-0.006
	(-7.03)	(-0.04)
Observations	17,294	17,294
R-squared	0.011	0.017
F test	0	0
r2_a	0.0109	0.0163
F	18.76	45.20

**Table 7: Robustness Test** 

Robust t-statistics in parentheses: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1

We summarize the results of our study in Table 8, which show that all our hypotheses were confirmed by data from Chinese public companies comprising our sample.

Hypothesis formulation	Confirmation / rejection of hypothesis
<b>Hypothesis 1</b> . The fulfilment of corporate social responsibility enhances the company's sustainable growth	Confirmed
<b>Hypothesis 2</b> . The strength of internal control of a company is positively correlated with the level of sustainable corporate growth	Confirmed
<b>Hypothesis 3</b> . Corporate social responsibility and the strength of internal control combined exerting a synergistic effect on the sustainable corporate growth	Confirmed

Table 8: Study's Result at a Glance
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#### **5.** Discussions and Conclusions

This paper examines the question of whether corporate social responsibility and the strength of internal control effect alone, as well as combined the sustainable corporate growth of Chinese listed companies. By examining the sample of 17,294 firm-year observations of China's A-share listed companies over the period 2010 to 2018, we conclude that socially responsible firms fare better in SCG. Moreover, the same testimony holds for the relationship between IC and SCG. Furthermore, we further examine the combined effects of CSR and IC on SCG and find that CSR and IC exerting a synergistic effect on SCG.

In fact, many Chinese firms waver to strongly engage in CSR activities as they worry that such actions may not boost firm profitability level or their status on the stock market. Nevertheless, the empirical findings of this paper indicate that CSR active engagement can produce sustainable corporate growth and may yield a win-win effect bringing favorable results for companies and society as a whole. Specifically, we hypothesized that due to downside risk and upside potential effects CSR can enhance the company's sustainable growth and confirmed that suggestion. Thus, companies that doubted the possibility of combining financial results and social responsibility, can, based on our findings, dispel doubts and boldly plunge into the world of corporate social responsibility expecting not only additional costs but also significant benefits.

We find that the quality of internal control of an enterprise plays a role in promoting the sustainable development of the enterprise, and the benign interaction between the CSR and IC can realize the interactive influence on the sustainable growth of the enterprise, and then produce the synergy effect of "1+1>2". When considering the synergy between internal control and CSR, the performance of CSR is not conducive to the SCG of the company in the model. The possible reason is that the executive power is too large, and the internal control of listed companies with high management power faces a higher risk of failure.

Thus, we believe that the "trench effect" brought about by it will not be conducive to the fulfilment of corporate social responsibility, although the specific reasons for it require further research and analysis. Therefore, from this, we aver that companies should actively improve the company's internal governance, achieve checks and balances of power among stakeholders, and prevent senior management from overriding internal control and harming the company's sustainable development capabilities. The government should encourage and guide the development and improvement of the market, and create a good external environment for executive governance. Thus, we believe that CSR and IC help by a) greater involvement of different stakeholder groups and b) more prudent use of available resources, consume less external resources for their growth, which means contributing to the sustainable development of society as a whole.

Our study based on the new idea of the study to determine the relationship between SCR and IC on the one hand and sustainable corporate growth on the other assumes that there is a relationship between the craving for and practice of socially responsible and purely economic sphere of enterprise. Our findings testify to the statement that in the modern world ostensibly pure economic phenomena and social responsibility are no longer separated by an inaccessible high wall as they used to be, vice versa, they are combined into a complex ecosystem that interacts according to its own rules, which although are not yet fully discovered. We made inroads into this paltry studied phenomenon and can say that in the People's Republic of China, those companies that are more actively involved in corporate social responsibility have a higher threshold of sustainable corporate growth, which allows them to grow faster internally than other companies not so active in social responsibility. Well-established internal control works similarly - it helps to use internal resources more efficiently, thus preventing their inefficient use, which in turn provides more resources for growth. Moreover, we document that the combined effect of these two phenomena has an even greater effect on sustainable corporate growth, creating a synergistic effect. We prove that this studied effect can have an advantageous-to-all construct, because an individual firm grows economically, causing less harm to the environment, and at the same time society as a whole also benefits from this, since the firm does not use additional resources, whilst CSR and IC increase the ceiling of internal growth of the firm through internal resources. Since this win-win situation is exactly the state we are striving for, therefore we believe that the results of our study have significant practical value.

In the course of the discussion, we will note that we believe that CSR has such a significant impact on the growth of enterprises not solely due to the two effects we mentioned (downside risk reduction and intensifying upside potential), but also because of what is called effective stakeholder management. Building relationships with stakeholders gives a significant synergistic effect on all areas of the company, as stakeholders are representatives of the environment in which the company operates. Opening a company for stakeholders especially at the level of involvement strategy, the third higher level of engagement according to (Stocker et al., 2020), often brings additional expertise to the governance of the company, expands ties with the outside world, strengthens cooperation with partners, but the main thing is that it integrates the company into its environment, rather than pulling it out of it - the undesirable result of insatiable desire to grow at all costs

paradigm. In this regard, our study is in line with previous research, which empirically demonstrated that companies applying eco-activities consolidate "stakeholder's environmental interests and knowledge through communication and cooperation engagement mechanisms" (Garcés-Ayerbe et al., 2019). Moreover, our study is fully consistent with the opinion first expressed by (Hart, 1995) that firms establishing broader stakeholder integration capabilities make bigger and bolder endeavors in eco-innovation (Hart, 1995). In other words, our study gives a new sound to Hart's phrase, confirming that the purely economic world and environmental attitude are related, as environmental attitude even first steps in that direction produce favorable outcomes in the economic sphere. Moreover, we believe that our findings give further credence to the statement we made in the introductory lines of the paper related to the importance of business discourse in the concept of sustainable development, as opposed to exclusively pertaining to environmental and social discourses. The study of business discourse is crucial because environmental, social and business discourses should not be considered as separate ones or as isolated, contrary they should be regarded as integrated, and our study testifies to close compatibility of these discourses. Moreover, we believe that that strain of research (stakeholder engagement effect on all areas of the company) could bring many other undiscovered effects, which requires further research on this issue and awaits its researchers.

We believe that the evidence we have obtained fits well into agency theory and stakeholder theory. CSR by downside risk reduction, intensifying upside potential and stakeholder management contributes to reducing the problem of information asymmetry between managers and owners, thus lessening agency problems and disciplining the managers. Internal control works in the same vein. For example, the DIB index we utilized assumes that the presence of an audit committee with a majority of independent members in the case of their true independence and professionalism can indeed reduce the opportunistic behavior of managers and, consequently, result in greater commitment to the goals of stakeholders.

Although we theorize that the effect we observe is explained by agency theory and indeed we found a positive relationship between CSR and corporate sustainability in our first two models, however, in model 3, which studied the combining effect of CSR and internal control, this relationship was negative, which begs for explanation. Here, institutional theory weighs in bringing with it the context as China is a very specific jurisdiction, with many features that need to be taken into account when evaluating our results. Studies are averring that the traditional rationale of agency theory is incapacitated in the Chinese setting as a result of the coexistence of principal-agent conflicts and principal-principal conflicts, and the volatile supremacy status of two conflicts in line with the contexts (Chen et al., 2021).

Thus, our study has explications for managers and regulators alike. The fact that companies that are active in corporate social responsibility and have strong internal control have a higher level of sustainable corporate growth means that managers need to push their companies more actively and promote their activities in the field of corporate social responsibility. Companies need to step up efforts to promote CSR and strengthen IC. Next,

the positive relationship between CSR and SCG should also stimulate firms to attain positive financial gains through CSR engagement. Consequently, CSR actions should be part and parcel of the firm's planning, controlling and decision-making process. Regulators, in turn, are advised to create an environment that encourages companies to be active in CSR and strengthen their internal control systems.

However, the research in this article has certain limitations. This paper contains an empirical analysis based on a static panel, hence, the answer to the questions whether CSR and internal control and the interaction between the two have intertemporal effects on the sustainable development of the company, and whether the effect alienates the relationship between the three, etc. is out of its scope. So in further studies, the effect of time lag can be applied in the analysis. Next, we did not consider the impact of the business cycle on the studied relationships which we sense could yield some useful findings. Therefore, further studies are advised to integrate those factors to stretch this lineage of research.

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