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CLAN CULTURE AND CORPORATE SOCIAL RESPONSIBILITY IN CHINESE FAMILY FIRMS

GUANGLI ZHANG*, HUILI XUE*, HAO GAO† and XIAOYUAN LIU*,‡

*The Business School, Central University of Finance and Economics
Beijing 100081, P. R. China

†PBC School of Finance, Tsinghua University
Beijing 100084, P. R. China
‡liuxiaoyuan@cufe.edu.cn

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The clan cultural heritage accumulated over thousands of years is crucial for understanding corporate social responsibility (CSR) behaviors in Chinese family firms. This paper uses city-level genealogy density data to examine the impact of clan culture on family firms' CSR behavior. Findings show that clan culture can significantly improve family firms' CSR behavior, even considering the endogeneity. For the influence mechanism, we find that clan culture's spirit of solidarity and mutual benefit and moral restraint effect are important influence mechanisms. We also analyze the moderating effects of ultimate shareholder experience, family involvement, and institutional environment on the relationship between clan culture and family firms' CSR and find that clan culture shows a much larger impact on family firms' CSR behavior in those firms with higher family involvement, lower government intervention, or whose ultimate shareholder has Cultural Revolution experience or lacks overseas experience.

Keywords: Clan culture; corporate social responsibility; family firms.

JEL Classifications: M14, L21, M19

1. Introduction

Social issues, such as environmental pollution, food, and product safety, have become increasingly prominent, causing great concern for corporate social responsibility (CSR) behavior. Stakeholder theory holds that not only shareholders make to the survival and development of modern enterprises through their capital investment and bear all the risks of business operations but all other stakeholders. Correspondingly, enterprises must also take the social responsibility for stakeholders (Donaldson and Preston, 1995). Thus, CSR has become an inevitable decision-making process in enterprises' production and operation. Moreover, numerous studies have discussed the factors affecting CSR behavior, particularly individual managerial characteristics (Chin *et al.*, 2013; Petrenko *et al.*, 2016;

‡Corresponding author.

Wu *et al.*, 2019), corporate financial status, governance structure (Rao and Tilt, 2016; García-Sánchez *et al.*, 2019; Sarhan and Najjar, 2022) and institutional environment (Zyglidopoulos *et al.*, 2012; Liang and Renneboog, 2017; Li *et al.*, 2022), though family influence has limited discussion.

Although the modern corporate system has become the mainstream form of business, influence of the family has remained in many firms. Numerous studies have found that most companies worldwide are family-controlled (Déniz and Suárez, 2005). The combination of families and firms significantly impacts corporate governance structure, business objectives, strategic choices, and corporate performance (Chrisman *et al.*, 2010; Kraus *et al.*, 2011). Family firms' CSR behavior often shows their features. Existing research mainly analyzes the factors affecting family firms' CSR behavior from the perspectives of family firms' ultimate shareholder characteristics (Zhou, 2014; Rodríguez-Ariza *et al.*, 2017; Meier and Schier, 2022), family involvement (Yu *et al.*, 2015; Kassar *et al.*, 2017; Ma *et al.*, 2022), and institutional environment (Ghoul *et al.*, 2016; Labelle *et al.*, 2018; Han *et al.*, 2020). Except for a few studies (Aoi *et al.*, 2015; Yu *et al.*, 2015; El Ghoul *et al.*, 2016), most of the existing researches employ the European and U.S. family firms as samples. Therefore, Chapple and Moon (2007) and Yu *et al.* (2015) point out that research on this topic is relatively sparse. The institutional environments of Asia are not well developed and the informal institutions play an important role in the economy. As an essential part of the informal institutions, the culture can show a significant influence on the family firms' behavior including the CSR behavior in Asia. With a long and continuous history, China possesses a special culture which permeates every aspect of life. Based on the Chinese context, we discussed the family firms' CSR behavior from the perspective of Chinese traditional culture.

Clan culture originated in the 11th century BC (Peng, 2010), is an integral part of Chinese traditional culture, and remains vital after many years. Clan culture evolved from the clan with blood relationship as the premise and blood inheritance as the core, which has gradually become the norms that family members need to abide by, affecting their cognition, behavior, and attitude (Peng, 2004; Guiso *et al.*, 2006). Clan culture advocates solidarity within the clan and emphasizes its members' responsibilities and moral obligations. Moreover, clan rules also record clan members' duties and obligations. If clan members violate morals, they will be punished, including expulsion from the clan (Watson, 1982). Therefore, clan culture promotes and regulates family members' CSR behavior. Business operations cannot be separated from a cultural environment, and family members play an essential role in family firms. Thus, does clan culture also affect the family firms' CSR behavior? What mechanisms does clan culture use to influence family firms' CSR behavior? Discussing these issues helps to understand family firms' CSR behavior and grasp corporate development law from the cultural aspect.

This study uses city-level genealogy density data and CSR data of Chinese-listed firms to empirically analyze the relationship between clan culture and family firms' CSR behavior. Findings show that clan culture can significantly improve family firms' CSR behavior, and the findings are still robust after an endogenous test. We also test the impact mechanism of clan culture on family firms' CSR behavior, finding that clan culture's spirit of solidarity and mutual benefit and moral restraint effect are important mechanisms. We also analyze the moderating effects of ultimate shareholder characteristics, family involvement, and institutional environment on the relationship between clan culture and family firms' CSR behavior. The results show that clan culture more positively impacts family firms' CSR behavior in those firms with higher family involvement, lower government intervention, or whose ultimate shareholder has Cultural Revolution experience or lacks overseas experience.

Our paper contributes to two strands of literature. First, this paper extends clan culture and corporate behavior research. Clan culture symbolizes Chinese traditional culture, and a larger number of studies have extensively studied its origin, evolution, and function (Peng, 2004; Greif and Tabellini, 2010). While there exist a few papers with nascent interests in the microeconomic effects of clan culture, little research covers the question of how clan culture influences the decisions and behavior of corporations (Karlan *et al.*, 2009; Greif and Tabellini, 2017; Zhang, 2020). Thus, this paper introduces clan culture into the study of family firms' CSR and provides evidence from emerging economies on the interaction between culture and corporate behavior based on the Chinese context and unique advantages of clan culture. Second, this article offers a new direction for understanding family firms' CSR behavior from the clan culture perspective. Existing studies mainly analyze external environmental factors affecting CSR behavior from institutions, regulations, social supervision, and organizational culture (Zyglidopoulos *et al.*, 2012; Graafland and Noorderhaven, 2018); very few investigate the sociocultural dimensions of CSR behavior. However, clan culture in China's unique environment significantly influences entrepreneurs' values, organizational atmosphere, and corporate behavior. This article enriches the CSR framework by bridging the gap between clan culture and CSR behavior. The remainder of this paper is structured as follows: Section 2 presents a theoretical analysis of the relationship between clan culture and CSR behavior. Section 3 describes the methodology. Section 4 discusses the empirical results. Section 5 provides further analysis and Section 6 presents the conclusions.

2. Theoretical Background and Hypotheses

2.1. *Clan culture*

Clan culture originated in the Western Zhou Dynasty in the 11th century BC and evolved from clans with blood relationship as the premise and blood inheritance as the core (Peng, 2010). Genealogy, ancestral temples, clan rules, family properties, and clan chiefs are the core of a clan and an essential part of the clan culture, which maintains the clan's operation and development to constitute a complete clan system (Wu and Wang, 2014). Chinese values and norms that family members abide by originate from clan culture. Clan culture not only significantly influences their cognition, behavior, and attitude but also social and economic development. In the feudal period, the clan was the main body of social management at the grassroots level, which profoundly impacted people's survival, cohesion, enlightenment, autonomy, and mutual assistance. Many dynasty rulers introduced the clan into the ruling system to stabilize grassroots society (Su *et al.*, 2011). Clan culture in modern society has gradually declined, particularly since the founding of New China. At that time, clan culture was regarded as the dregs of the feudal period, lost original legitimacy, and suffered severe damage. Nevertheless, clan culture did not disappear but temporarily hid in the people (Parish and Whyte, 1978).

Since the reform and opening, numerous traditional activities have occurred in China, such as repairing the genealogy, rebuilding ancestral temples, and restoring ancestral worship. As a result, clan culture has gradually revived. As an influential informal institution, clan culture cooperates with formal institutions, affecting economic and social development. First, clan culture is conducive to increasing local public investments. The clan is the main body of regional charitable donations (Acs and Dana, 2001) and assumes the responsibility of helping the weak, building infrastructure, and providing medical, educational resources, and other public goods (Xu and Yao, 2015; Greif and Tabellini, 2017). Second, clan culture affects regional birth plans and pension plans. When the clan culture is influential, residents are willing to have many children and grandchildren. Furthermore, their preference for having boys also increases, affecting national policy implementation, such as family planning (Peng, 2010). Moreover, children in areas with influential clan culture will be filial and willing to accept parental responsibilities, whereas residents will be less involved in social pension plans (Zhang, 2020). Third, clan culture also affects village governance. Clan members can gain a high voting rate in the village committee election (Su *et al.*, 2011). Finally, clan culture significantly impacts the private economy by helping private enterprises obtain low-cost finances (Zhang, 2020) and increasing the number and scale of regional entrepreneurship (Peng, 2004). Huang *et al.* (2022) address the impact of China's historical clan culture on corporate behavior, which finds that places with a strong clan culture make their enterprises more conservative and unwilling to carry out high-risk innovations and cross-city M&As.

2.2. *Clan culture and corporate social responsibility in family firms*

Culture shapes economic entity values and thus affects their cognition and behavior (Dimaggio, 2003) by influencing individual preferences and values (Guiso *et al.*, 2006). Chinese clan culture has been passed down for thousands of years, deeply rooted in individual consciousness, and internalized into family members' unique values, which can subtly guide family members' behavior and decision-making. It also can affect family firms' CSR behavior by affecting family managers' behavior and decision-making. Specifically, Clan culture influences family firms' CSR behavior in the following ways.

First, clan culture is mainly characterized by the spirit of solidarity and mutual benefit (Peng, 2004). Clan culture advocates unity within the clan, emphasizes clan members' responsibilities and moral obligations, and gradually develops an emotional preference for "solidarity and reciprocity" (Peng, 2004). Furthermore, clan culture can continuously strengthen the spirit of solidarity and mutual benefit among clan members through worshiping ancestors, compiling genealogy, and building ancestral temples. These activities can internalize the spirit of solidarity and mutual benefit into clan members' moral values and deduce into moral norms of the society. The spirit of solidarity and mutual benefit can influence clan members to help each other and cooperate in life, including building public facilities, providing labor services, helping the weak, providing public goods, etc. (Greif and Tabellini, 2017). Furthermore, clan culture strongly influences the altruistic motivation of family firms' ultimate shareholders. As a result, the shareholder will actively undertake CSR and pay attention to internal and external stakeholder needs to realize the clan's expectations. According to socioemotional wealth (SEW) theory, family firms' CSR behavior not only fulfills collective responsibility and moral obligations but also increases SEW. This condition is conducive to establishing intimate relations between the company and family and improves the family's social status (Gómez-Mejía *et al.*, 2007). Therefore, the spirit of solidarity and mutual benefit in clan culture can increase family firms' CSR behavior.

Second, clan culture has strict ethics that can affect CSR behavior. Ethics is an essential connotation of clan culture (Peng, 2004). On the one hand, clan rules record clan members' responsibilities and obligations. Clan rules require family members to clarify social roles, abide by the law and disciplines, fulfill responsibilities and obligations, and realize the clan's expectations. Clan members who violate morality will be punished, which includes expulsion from the clan (Watson, 1982). Punishment is found to be a vehicle for increasing pro-social behavior (Bao *et al.*, 2022). On the other hand, clan culture encourages clan members to help each other and donate to the people outside the clan (Greif and Tabellini, 2017). Genealogy also records the ancestors' outstanding deeds in past dynasties using biography to set an example for inspiring future generations to work hard. If clan members significantly contribute to the clan and society's development, their status and reputation in the clan will improve, and they will be praised by the clan's generations (Xu and Yao, 2015). Under the influence of ethics in clan culture, family firms that do not assume CSR will bear severe moral criticism and lose clan members' recognition. As a result, family firms will incur high social capital losses. On the contrary, taking CSR gains recognition from the clan and improves corporate reputation, which can realize family members' desire to "bring honor to one's ancestors." Therefore, clan culture helps to regulate corporate behavior and promote family firms' CSR behavior.

The analysis above illustrates the spirit of solidarity and mutual benefit in clan culture affects family firms' ultimate shareholder values and improves their altruistic motivation to fulfill social responsibilities. Ethics in clan culture supervises corporate behavior through moral constraints and incentives, which encourages family firms to assume CSR. Therefore, we develop our hypothesis as follows:

H1: *Clan culture positively affects family firms' CSR behavior.*

H2: *The spirit of solidarity and mutual benefit, and moral restraint effect of ethics are important mechanisms for the impact of clan culture on family firms' CSR behavior.*

3. Methodology

3.1. *Data collection*

We used all A-share-listed family firms on the Shanghai and Shenzhen Stock Exchanges as our sample to test the relationship between clan culture and family firms' CSR. The sample period is restricted from 2010 to 2019 due to the small sample size of CSR data before 2010. Following Villalonga and Amit (2006), we classify companies as family firms if the following criteria are met: (i) Ultimate control can be attributed to a natural person or family. (ii) The ultimate controller is directly or indirectly the largest shareholder of the listed company. Moreover, firms with multiple controllers and no kinship between the controllers are eliminated from the sample. We also exclude companies in the financial industry and companies with seriously inadequate observations to ensure data validity and minimize the effect of other factors on the research results. The final sample comprises 12,233 firm-year observations. CSR data are collected from HeXun CSR Rating Data.[1] Clan culture data are obtained from the *Chinese Family Tree*, published by Shanghai Chinese Classics Publishing House. Other data are from China Stock Market & Accounting Research Database, China Economic Net Statistics Database, and the Chinese General Social Survey (CGSS). In the regression analysis, all continuous variables are reduced by 1% to reduce the influence of outliers on the analysis results.

3.2. *Measurement*

3.2.1. *CSR*

CSR is the dependent variable. With the development of stakeholder theory, it has become the mainstream to use whether the company meets the needs of multiple stakeholders to measure CSR. Based on Dyer and Whetten's (2006) who employed Businessweek data for their CSR data, we choose HeXun CSR Rating Data to measure CSR.[2] HeXun CSR Rating Data investigates the CSR performance of all A-share-listed companies on the Shanghai and Shenzhen Stock Exchanges. CSR performance mainly includes five aspects: shareholder responsibility; employee responsibility; supplier, customer, and consumer rights responsibility; environmental responsibility; and social responsibility. Each aspect includes 2–18 indicators (a total of 37 indicators) to measure CSR, which is significantly comprehensive and authoritative. Finally, adjust the weight of the five indicators according to the industry to get accurate scores. A company with a high score has better CSR behavior.

3.2.2. *Clan culture*

Clan culture (*Clan*) is the independent variable. Genealogy records the development of family generations and is the core carrier of clan culture (Peng, 2004; Greif and Tabellini, 2017). Therefore, Clan members in areas with strong clan culture will keep more genealogy (Zhang, 2017). We refer to Pan *et al.* (2019) practice and use the number of genealogies per 10,000 people to measure clan culture. The city level genealogies are collected from the *Chinese Family Tree*[3] published by Shanghai Chinese Classics

[1] The first professional company evaluates the listed company's CSR in China.

[2] We note that existing studies mostly use the "Runling CSR Rating Report" to measure the CSR of Chinese listed companies. However, in practical applications, we find that the "Runling CSR Rating Report" contains fewer family firms, so we chose Hexun CSR rating data with similar dimensions and more corporate data.

[3] The "Chinese family tree," published by Shanghai Classics Publishing House, is a book with the most extensive collection of Chinese national genealogies and the most abundant content, revealing the basic situation of the Chinese genealogies ultimately.

Publishing House. The sample data ranges from Qing Dynasty to 1990, since the pedigrees before Qing Dynasty are very small. Then, we combine every city's population in 1990 to construct the city-level index of clan culture. Moreover, we match family firms' registered addresses with the clan culture index to obtain firm-level clan culture index.

3.2.3. *Mediator variables*

This study examines the mechanisms of clan culture on family firms' CSR using two mediator variables: the spirit of solidarity and mutual benefit (*Soli_ ben*) and ethics (*Ethics*). The spirit of solidarity and mutual benefit incentives clan members to help each other in production and life (Greif and Tabellini, 2017). We select two questions about solidarity and mutual benefit from CGSS: "Do you think everyone should necessarily help each other in the workplace?" and "Do you think a job must be good for society?". The score ranges from 1 to 5. The higher the score, the higher the regional solidarity and mutual benefit. We add up the scores of the two questions and divide it by the number of people who filled out the questionnaire in the city to obtain the variable of the spirit of solidarity and mutual benefit. Then, we match this resulting variable with the family firms' registered addresses to obtain the firm-level spirit of solidarity and mutual benefit (*Soli_ben*).

Under the restraint of ethics, clan members are ashamed of unethical behavior. We select the questions about shame from CGSS: "Do you think the current society lacks shame?". The score ranges from 1 to 5. The higher the score, the higher shameful the society. Similarly, we add up the scores of the question and divide it by the total number of people who filled out the questionnaire in the city to obtain the ethics variable. Then, we match the resulting variable with the family firms' registered addresses to obtain the firm-level ethics (*Ethics*).

3.2.4. *Control variables*

We control other factors which affect family firms' CSR based on relevant research. Waddock and Graves (1997) and Brammer and Millington (2008) emphasized that companies' financial situation is an essential factor affecting family firms' CSR. A good financial situation can be conducive to fulfilling CSR. We use the debt-to-asset ratio (*Lev*) and return on equity (*ROE*) to measure family firms' financial situation affecting CSR. Many studies have found that corporate governance is also essential to family firms' CSR. Suitable corporate governance mechanisms can balance stakeholder relationships and protect their rights, promoting CSR (Liu *et al.*, 2018; García-Sánchez *et al.*, 2019). Thus, we also control the corporate governance indicators, including dual employment (*CEO_ dual*) and equity concentration (*Top5*). Moreover, we also control firm size (*Size*) (Amann *et al.*, 2012) and survival time (*Age*) (Kim and Lee, 2018). Table 1 lists the specific indicators.

3.3. *Empirical method*

We employ the following basic model to make regression. In addition to controlling firm size (*Size*), survival time (*Age*), dual employment (CEO_ *dual*), equity concentration

Table 1. Variable Definition

	Name	Label	Measurement
Independent Variable	CSR	Corporate social responsibility	HeXun CSR Rating Data
Dependent Variable	Clan	Clan culture	The number of genealogy of every city in Qing Dynasty to 1990/the population in 1990
Mediator Variables	Soli_ ben	The spirit of solidarity and mutually beneficial	The scores of solidarity and mutually beneficial in the China Comprehensive Social Survey (CGSS)
	Ethics	Ethics	The score of Ethics in the China Comprehensive Social Survey (CGSS)
Control Variables	Size	Firm size	Ln (assets)
	Age	Survival time	Fiscal year-established year
	CEO_ dual	CEO dual employment	It takes the value of 1 when CEO and chairman are the same person and 0 otherwise.
	Top5	Equity concentration	The percentage of the firm owned by the top five shareholders
	Lev	Debt to asset ratio	Liabilities/assets
	ROE	Return on Equity	Net Profit/Shareholders Equity

(*Top5*), debt-to-asset ratio (*Lev*), and return on equity (*ROE*) in the regression, we also control the city effect, year effect, and industry effect. We use the robust standard errors clustered at the city level in all regression.

$$\begin{aligned} \text{CSR}_{it} = {} & \alpha + \beta_1 \text{Clan}_i + \beta_2 \text{Size}_{it} + \beta_3 \text{Age}_{it} + \beta_4 \text{CEO\_dual}_{it} + \beta_5 \text{Top5}_{it} + \beta_6 \text{Lev}_{it} \\ & + \beta_7 \text{ROE}_{it} + \text{CityEffect} + \text{IndustryEffect} + \text{YearEffect} + \varepsilon_{it} \end{aligned} \quad (1)$$

4. Empirical Results

4.1. *Descriptive results*

Table 2 reports the summary statistics of the main variables. The mean value of *CSR* is 23.02, ranging from −18.15 to 89.01. These figures show that family firms' CSR is significantly different. The mean value of clan culture (*Clan*) is 0.914 volumes per 10,000 people, and the standard deviation is 1.358, indicating that China is rich in clan culture. The mean values of *Soli_ ben* and *Ethics* are 6.936 and 2.812, respectively, with a large discrepancy.

Table 2. Descriptive Statistics of the Main Variables

Variable	Mean	Min	Max	p50	sd	N
CSR	23.02	−18.15	89.01	21.62	14.05	12233
Clan	0.914	0.296	8.190	0.357	1.358	12233
Soli_ben	6.936	5.625	9.000	6.949	0.463	11955
Ethics	2.812	2.382	3.215	2.831	0.183	11955
Size	21.75	15.58	26.86	21.65	1.085	12233
Age	15.58	2	61	15	5.731	12233
CEO_dual	0.373	0	1	0	0.484	12233
Top5	0.537	0.030	0.950	0.544	0.149	12233
Lev	0.378	0.046	0.852	0.364	0.197	12233
ROE	0.064	−0.616	0.310	0.070	0.113	12233

Notes: Table 2 reports the summary statistics of the main variables. Variable definitions are in Table 1. The 2015 CGSS project survey covered 478 villages in 28 provinces/cities/autonomous regions. Due to missing data in three provinces, the sample size of *Soli_ben* and *Ethics* was 11955.

Regarding control variables, the results of three finance variables show that there are large differences in firm size (*Size*), firm leverage (*Lev*), and profitability (*ROE*). In addition, firm age (*Age*), dual employment (*CEO_dual*), and ownership structure (*Top5*) also have large differences in distribution.

4.2. ***Regression results***

4.2.1. *Clan culture and family firms' corporate social responsibility*

Table 3 presents the results of the benchmark regression of clan culture and family firms' CSR. In Column (1), the coefficients of clan culture are significantly positive at the 1% level, which is consistent with hypothesis 1 that clan culture can increase family firms' CSR behavior. As the independent variable is a city-level variable, we calculate the average of CSR and control variable at the city level and analyze the impact of clan culture (*Clan*) on regional CSR behavior (*Mean_CSR*). The results in Column (2) show that the regression coefficient of *Clan* is still significantly positive. These results indicate that clan culture can positively impact Chinese family firms' CSR behavior.

Regarding the control variables, both *Size* and *ROE* are significantly and positively correlated to family firms' CSR behavior, while *Lev* negatively relates to family firms' CSR behavior. These results indicate that family firms with better financial performance will have more CSR behavior (Amann *et al.*, 2012). From the corporate governance perspective, equity concentration (*Top5*) can promote family firms' CSR behavior.

4.2.2. *Endogenous analysis*

The baseline results may suffer the omitted variable bias. Following Pan *et al.* (2019), we employ the 2SLS method with the per capita rice planting area in 1990 as the instrumental

Table 3. Clan Culture and Family Firms' CSR Behavior

Dependent Variable	(1) CSR		(2) Mean_ CSR
Clan	16.869***	Clan	21.413***
	(50.80)		(16.89)
Size	3.210***	Mean_ Size	4.012***
	(14.98)		(3.68)
Age	0.070	Mean_ Age	0.156
	(1.56)		(0.72)
CEO_dual	−0.443	Mean_ CEO_ dual	−0.346
	(−1.24)		(−0.25)
Top5	4.624***	Mean_ Top5	6.052
	(3.49)		(1.33)
Lev	−8.902***	Mean_ Lev	−11.988***
	(−8.63)		(−2.96)
ROE	48.685***	Mean_ ROE	24.012***
	(30.73)		(6.85)
Year fixed effects	Yes	Year fixed effects	Yes
Industry fixed effects	Yes	Industry fixed effects	Yes
City fixed effects	Yes	City fixed effects	Yes
Constant	−55.912***	Constant	−72.664***
	(−9.57)		(−3.27)
N	12,233	N	1,758
Adjusted R^2	0.392	*Adjusted* R^2	0.543

Notes: The table presents the regression results of clan culture on family firms' CSR behavior. ***, **, and * are significant at the levels of 1%, 5%, and 10%, and the t-value is presented in parentheses as shown in the table. We use the robust standard errors clustered at the city level. See Table 1 for variable definitions.

variable to solve the omitted variable bias. Clans evolved from the development of the farming economy. Compared with other planting methods, rice planting often requires great cooperation between farmers to build water conservancy, sow, and harvest (Talhelm *et al.*, 2014), which provides natural conditions for clan culture formation (Freedman, 1996). Therefore, areas with more rice cultivation have stronger clan culture. Simultaneously, the per capita rice planting area in 1990 is the natural environment, which does not directly affect family firms' CSR behavior.

Table 4 lists the regression results with the instrumental variables. The first-stage regression result in Column (1) shows that the per capita rice planting area (*Rice*) positively correlates with clan culture. The F-value is greater than 10, indicating that the influence of weak instrumental variables is not significant. The second-stage regression result in Column (2) shows that the coefficient of *Clan* remains significantly positive, which is consistent with the baseline regression results. Therefore, the conclusion that clan culture increases the family firms' CSR behavior remains after using the instrumental variables to control the omitted variable bias.

Table 4. Endogenous Analysis

Dependent Variable	(1) Clan	(2) CSR
Rice	1.050***	
	(25.18)	
Clan		2.572***
		(7.00)
Size	0.016	3.424***
	(0.99)	(22.28)
Age	−0.010***	0.104***
	(−3.53)	(3.88)
CEO_dual	−0.068**	−0.400
	(−2.28)	(−1.45)
Top5	0.629***	2.930***
	(6.20)	(3.01)
Lev	0.140	−9.365***
	(1.55)	(−11.12)
ROE	−0.314**	50.306***
	(−2.34)	(40.53)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
City fixed effects	N	N
Constant	−0.604	−49.732***
	(−1.63)	(−14.49)
N	9,103	9,103
Adjusted R^2	0.095	0.250
Weak Instrumental Variable Test	T = 29.82	

Notes: The table presents the regression results of the endogenous analysis. The data comes from the statistical database of CNKI. Due to the severe lack of data in early China, some cities with missing data are eliminated, and the sample size is 9103. ***, **, and * are significant at the levels of 1%, 5%, and 10%, and the *t*-value is presented in parentheses as shown in the table. We use the robust standard errors clustered at the city level. See Table 1 for variable definitions.

4.2.3. *Mediating effect analysis*

How can the clan culture affect the family firms' CSR behavior? We use the three steps method proposed by Baron and Kenny (1986) to explore the mediating role of *Soli_ben* and *Ethics* between clan culture and family firms' CSR behavior. As the results of Table 3 have proved the first step, we only need to examine the other two steps, including the impact of *Clan* on *Soli_ben* and *Ethics*, and the impact of *Clan*, *Soli_ben* and *Ethics* on *CSR*. And if *Clan* is significantly correlated with *Soli_ben* and *Ethics*, and when adding *Soli_ben* and *Ethics*, *Soli_ben* and *Ethics* are significantly correlated with *CSR* and the effect of *Clan* on *CSR* is smaller or insignificant, and *Soli_ ben* and *Ethics* can be treated as a mediating variable between *Clan* and *CSR*.

The results in Columns (1) and (3) of Table 5 show that the variable *Clan* is significantly correlated with *Soli_ben* and *Ethics*. More importantly, the results of Columns (2) and (4) indicate that when adding the *Soli_ben* and *Ethics*, *Clan* is positively and significantly correlated with *CSR* at the 1% level, and the coefficients of *Clan* become smaller than the benchmark regression result. Additionally, the Z-statistic in the Sobel test is significant at the 1% level. The above results meet the requirement of mediating variable

Table 5. Mediating Effect Analysis

Dependent Variable	(1) Soli_ ben	(2) CSR	(3) Ethics	(4) CSR
Clan	7.658***	1.873***	2.273***	1.705***
	(25.82)	(27.89)	(32.33)	(6.10)
Soli_ben		0.252***		
		(3.27)		
Ethics				1.062***
				(35.05)
Size	2.122***	3.116***	−0.054	3.116***
	(4.45)	(14.28)	(−0.48)	(14.28)
Age	−0.595***	0.066	−0.063***	0.066
	(−7.22)	(1.44)	(−3.21)	(1.44)
CEO_dual	1.124	−0.423	0.291	−0.423
	(1.34)	(−1.16)	(1.47)	(−1.16)
Top5	−8.334***	4.661***	0.284	4.661***
	(−2.88)	(3.52)	(0.41)	(3.52)
Lev	−4.805*	−8.855***	2.900***	−8.855***
	(−1.87)	(−8.48)	(4.76)	(−8.48)
ROE	13.429***	48.769***	2.140**	48.769***
	(3.55)	(30.20)	(2.38)	(30.20)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
City fixed effects	No	Yes	No	Yes
Constant	650.629***	−226.602***	142.850***	−203.117***
	(61.59)	(−4.69)	(57.04)	(−21.81)
N	11,955	11,955	11,955	11,955
Adjusted R^2	0.077	0.379	0.109	0.379
Sobel Test	$Z = 2.584$***, The intermediary effect is significant		$Z = 5.987$***, The intermediary effect is significant	

Notes: The table presents the regression results of the mediating effect test. ***, **, and * are significant at the levels of 1%, 5%, and 10%, and the *t*-value is presented in parentheses as shown in the table. We use the robust standard errors clustered at the city level. See Table 1 for variable definitions.

tests and we can conclude that the spirit of solidarity and mutual benefit, and moral restraint effect of ethics are important mechanisms for the impact of clan culture on family firms' CSR behavior.

5. Further Research

The above results have proved that clan culture can affect family firms' CSR behavior, but family firms are heterogeneous. In this section, we examine the role of family firms' heterogeneity on the relationship between clan culture and family firms' CSR behavior from the perspective of the ultimate shareholder's personal experiences, family involvement, and institutional environments.

5.1. *The role of the ultimate shareholder's characteristics*

Individual values are also affected by their growth experience (Luo *et al.*, 2017; Hegde and Mishra, 2019). We choose the overseas experience and Cultural Revolution experience to examine the role of the ultimate shareholder's characteristics.

The first is the overseas experience. Ultimate shareholders with overseas experience are more likely to be influenced by foreign cultures, which will affect their cognitive framework and weak the influence of clan culture. Studying and working abroad are the main sources of overseas experience. We divide the whole sample into two sub-samples based on whether the ultimate shareholders have overseas experience. The results in Columns (1) and (2) of Table 6 show that *Clan* is insignificant in the sub-sample with oversea experience while is positively and significantly correlated with family firms' CSR at the 1% level in the sub-sample without oversea experience, indicating that in the family firms where the ultimate shareholder has overseas experience, the impact of clan culture on family firms' CSR behavior will statistically disappear.

The second is the Cultural Revolution experience. During the Cultural Revolution, clan culture was regarded as the dregs of the feudal period. With the political movements, clan culture lost legitimacy and suffered severe damage (Wang, 1991). Although after the reform and opening up, clan culture has gradually revived through traditional activities such as repairing genealogy, rebuilding ancestral temples, and restoring ancestral worship, the role of clan culture has still been weakened. Cultural Revolution occurred in 1966, so if ultimate shareholders were born before 1966, we define that they had Cultural Revolution experience and were more affected by the clan culture. We divide the whole sample into two sub-samples based on whether the ultimate shareholders have Cultural Revolution experience. The results in Columns (3) and (4) of Table 6 show that clan culture significantly and positively impacts family firms' CSR only in the sub-sample with Cultural Revolution experience, indicating that Cultural Revolution experience can strengthen the relationship between clan culture and family firms' CSR behavior.

5.2. *The role of family involvement*

Family involvement directly determines family influence on firms. Family members participate in business management through family ownership and family management

Table 6. The Role of Ultimate Shareholder Experience

Dependent Variable	(1) CSR Subsample with Oversea Experience	(2) CSR Subsample without Oversea Experience	(3) CSR Subsample with Cultural Revolution Experience	(4) CSR Subsample without Cultural Revolution Experience
Clan	37.872	26.782***	19.440***	15.467
	(1.56)	(5.42)	(39.46)	(0.58)
Size	2.842***	4.613***	3.472***	2.313***
	(4.79)	(27.20)	(13.11)	(5.53)
Age	0.088	0.088***	0.046	−0.028
	(0.86)	(2.99)	(0.79)	(−0.46)
CEO_dual	−0.872	−0.054	0.094	−0.728
	(−0.90)	(−0.18)	(0.20)	(−1.09)
Top5	9.123**	10.974***	4.718***	1.719
	(2.23)	(10.62)	(3.14)	(0.60)
Lev	−13.928***	−15.870***	−10.349***	−10.849***
	(−4.25)	(−17.15)	(−6.91)	(−5.87)
ROE	16.988***	1.547***	56.311***	64.793***
	(7.66)	(7.68)	(25.50)	(18.29)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
City fixed effects	Yes	Yes	Yes	Yes
Constant	−63.985***	−86.429***	−62.012***	−36.358***
	(−4.34)	(−14.45)	(−9.73)	(−3.87)
Difference	3.65*		1.08	
N	828	8,251	6,312	2,774
AdjustedR^2	0.387	0.249	0.395	0.427

Notes: This table presents regression results pertaining to the role of ultimate shareholders' experience. The sample is divided by whether the ultimate shareholders have overseas experience or Cultural Revolution experience. ***, **, and * are significant at the levels of 1%, 5%, and 10%, and the t-value is presented in parentheses as shown in the table. We use the robust standard errors clustered at the city level. See Table 1 for variable definitions.

(Kowalewski *et al.*, 2010; Deephouse and Jaskiewicz, 2013). Family ownership involvement plays a vital role in family firms by supervising firms' behavior. A family with higher equity will have more voice and discretion in family firms' decision-making (Anderson and Reeb, 2003), which is an important guarantee to ensure family firms operate according to the family's will. Family management involvement helps clan culture play a role in family firms. Family members entering the management level can align the interests of owners and managers. Furthermore, the boundary between the family and the firm becomes unclear, and family-preferred values gradually become the family firms' goal as family members perform various management positions. Therefore, we conjecture that the positive impact of clan culture on family firms' CSR is larger in firms with higher family involvement.

Following Deephouse and Jaskiewicz (2013) and Schmid *et al.* (2014), We use the percentage of family ownership and the percentage of family members on the board to measure family ownership involvement and family management involvement, respectively. We divide the whole sample into four sub-samples based on the mean value of family ownership involvement and family management involvement. The results in Table 7 show that clan culture significantly and positively influences family firms' CSR in all sub-samples. However, the coefficient of *Clan* shows that the effect of clan culture on family

Table 7. The Role of Family Involvement

Dependent Variable	(1) CSR Subsample with High Family Ownership Involvement	(2) CSR Subsample with Low Family Ownership Involvement	(3) CSR Subsample with High Family Management Involvement	(4) CSR Subsample with Low Family Management Involvement
Clan	9.555**	0.129*	28.732***	11.281*
	(2.37)	(1.81)	(4.76)	(1.80)
Size	3.189***	3.341***	3.064***	3.190***
	(17.37)	(18.65)	(19.57)	(15.00)
Age	0.057*	0.056*	0.099***	0.050
	(1.90)	(1.70)	(3.55)	(1.37)
CEO_dual	−0.313	−0.592*	−0.270	−0.934***
	(−1.05)	(−1.83)	(−0.97)	(−2.62)
Top5	2.961**	5.765***	5.617***	3.408***
	(2.09)	(4.63)	(5.82)	(2.68)
Lev	−9.792***	−8.638***	−7.737***	−9.537***
	(−9.95)	(−9.02)	(−9.06)	(−8.61)
ROE	54.960***	43.998***	47.555***	49.513***
	(35.78)	(35.32)	(39.38)	(31.55)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
City fixed effects	Yes	Yes	Yes	Yes
Constant	−54.472***	−56.551***	−52.184***	−57.139***
	(−8.69)	(−6.35)	(−8.14)	(−7.11)
Difference	3.01*		9.35***	
N	6,122	6,111	7,316	4,917
Adjusted R^2	0.386	0.388	0.392	0.393

Notes: This table presents regression results pertaining to the role of family involvement. The sample is divided by the sample mean of family ownership involvement and family management involvement. ***, **, and * are significant at the levels of 1%, 5%, and 10%, and the *t*-value is presented in parentheses as shown in the table below. We use the robust standard errors clustered at the city level. See Table 1 for variable definitions.

firms' CSR behavior is bigger in the subsample with high family ownership and management involvement. These results are consistent with our conjecture.

5.3. *The role of government intervention*

Government intervention is one of the most critical institutional environments in China, which can impact corporate behavior and decision-making. On the one hand, firms in the region with higher government intervention are more motivated to perform rent-seeking activities and allocate considerable resources to non-productive activities (Gao, 2011), which will crowd out CSR expenditure. On the other hand, government intervention may hurt managers' decision-making freedom and even infringe on firms' interests, which will

Table 8. The Role of Government Intervention

Dependent Variable	(1) CSR Subsample with High Government Intervention	(2) CSR Subsample with Low Government Intervention
Clan	11.307	10.681**
	(0.86)	(2.36)
Size	3.185***	3.237***
	(19.96)	(16.55)
Age	0.054**	0.109***
	(2.05)	(2.94)
CEO_dual	−0.490*	−0.124
	(−1.84)	(−0.35)
Top5	2.780***	7.338***
	(2.88)	(6.25)
Lev	−9.381***	−8.339***
	(−11.12)	(−7.81)
ROE	52.361***	44.332***
	(41.90)	(30.84)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
City fixed effects	Yes	Yes
Constant	−31.087**	−57.644***
	(−2.32)	(−9.67)
Difference	2.01	
N	7,341	4,892
Adjusted R^2	0.396	0.411

Notes: This table presents regression results pertaining to the role of government intervention. The sample is divided by the sample mean of the government-market relationship index. ***, **, and * are significant at the levels of 1%, 5%, and 10%, and the *t*-value is presented in parentheses as shown in the table below. We use the robust standard errors clustered at the city level. See Table 1 for variable definitions.

increase family firms' interest concerns and stimulate family firms to transfer social responsibility to the government (Ostmann, 1998).

We use the government-market relationship index, a sub-index of the marketization index developed by Wang *et al.* (2019), to measure the provincial government intervention in China. We divide the whole sample into two subsamples based on the mean value of the government-market relationship index. We define the subsamples as Higher Government Intervention if the index is greater than the mean value of the government-market relationship index and Lower Government Intervention otherwise. The results in Table 8 show that *Clan* is insignificant in the sub-sample of High Government Intervention while is positively and significantly correlated with family firms' CSR behavior at the 5% level in the sub-sample of Lower Government Intervention. These results prove our conjecture that the impact of clan culture on family firms' CSR behavior is larger in the regions with lower government intervention.

6. Conclusion

Clan culture extensively influences Chinese society. Understanding family firms' CSR behavior cannot ignore clan culture in the Chinese context. This paper examines the impact of clan culture on family firms' CSR behavior using genealogical data and Hexun's CSR data from 2010 to 2019, and further investigates the influence mechanism and the moderating role of family firms' heterogeneity. First, we find that clan culture significantly positively impacts family firms' CSR behavior, and it persists after considering omitted variable bias. Second, results show that the spirit of solidarity and mutual benefit and the function of ethics incorporated in clan culture are the two Influence mechanisms. Finally, we further investigate the role of family firms' heterogeneity from the perspective of the ultimate shareholder's personal experiences, family involvement, and institutional environments, and find that clan culture shows a much larger impact on family firms' CSR behavior in those firms with higher family involvement, lower government intervention, or whose ultimate shareholder has Cultural Revolution experience or lacks overseas experience.

Based on the findings, we have some implications for the promotion of the CSR in Asia. First, traditional culture cannot only influence individual behavior decisions but also plays an essential role in corporate behavior decisions. The CSR calls for more input from the firms, therefore, many firms are unwilling to invest in the CSR. There is the potential for the government to promote firms' CSR investment by propagating more positive traditional culture. Second, the family firms should keep balance between the corporate governance and family factors. We conclude that the clan culture can positively affect the family firms' CSR investment which is beneficial for the society and firms' long-term development. Therefore, the family firms can take advantage of the good aspects of the family culture to help the firm make right decision.

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