

THE EFFECTS OF LOCAL SHAREHOLDERS ON FIRM PERFORMANCE: EVIDENCE FROM CORPORATE SOCIAL RESPONSIBILITY

HYOSEOK (DAVID) HWANG¹, HYUN GON KIM^{2*}

1. University of Wisconsin – Eau Claire, USA.
2. Rutgers University, USA

* Corresponding Author: Hyun Gon Kim, Rutgers University the School of Business Camden, 227 Penn St, Camden, NJ, USA, 08102.
☎ +1 (856) 668 4593 ✉ hyungon.kim@rutgers.edu

Abstract

This paper investigates the mediating role of corporate social responsibility (CSR) in the local ownership and firm performance relationship. Prior studies provide evidence of positive effects of local ownership on firm performance. We argue that local shareholders can ensure that firms develop reputational and relationship capital through corporate social responsibility (CSR) activities that lead to higher firm performance. Our sample consists of 1,351 local mutual funds and 2,279 unique firms for the sample period of 2005-2018, for a total of 10,419 firm-year observations. Using a regression-based approach for our mediation research design, we find that the positive relationship between local ownership and firm performance is mediated by a firm's CSR activities. Our results are consistent with instrumental stakeholder theory that a firm should consider the interests of its stakeholders for strategic and instrumental reasons, primarily to enhance its long-term sustainability and profitability.

Keywords: Local shareholders, CSR, strategic intangibles, firm performance

1. Introduction

Does the geographical proximity between institutional investors and their investments affect performance? A growing body of literature discusses the economic benefits of a geographical proximity between financial institutions and their investments, such as mutual fund performance (Coval & Moskowitz, 2001), proprietary trading profits (Hau, 2001), hedge fund performance (Teo, 2009), equity analysis (Malloy, 2005), and corporate innovation (Hwang, 2023). The literature suggests that nearness to firms provides an informational edge for nearby investors over distant investors, suggesting geographical distance as a proxy for informational costs. Investors can monitor the firms effectively and obtain a better understanding of the local economy, so the information acquisition costs are relatively lower for near firms, especially firms with highly uncertain investments (Chhaochharia et al., 2012). In other words, the monitoring effectiveness and information advantages are pronounced for firms with greater investment uncertainty.

Whether corporate social investments, also known as corporate social responsibility (CSR), are associated with the increased uncertainty in firm performance is under debate (Mackey et al., 2007). CSR may help build relationships with stakeholders and improve firm value (i.e., instrumental stakeholder theory; Jones, 1995). Instrumental stakeholder theory (IST) considers CSR practices as an instrument to increase shareholder value. For example, Edmans (2011) shows a positive relation

between employee satisfaction and long-term shareholder returns. Dimson et al. (2015) find that firms with successful CSR engagement experience improved performance and governance. To understand the underlying mechanisms through which CSR affects firm performance, Hasan et al. (2018) provide evidence that CSR tends to improve firm total factor productivity (TFP), thereby contributing positively to corporate financial performance (CFP). In contrast, others question the legitimacy of CSR and possible misappropriation and misallocation of scarce resources (Garriga & Melé, 2004; Margolis & Walsh, 2003). In addition, CSR may lead managers to pursue personal value, causing agency costs and deteriorating firm value (Masulis & Reza, 2015). Therefore, efficient allocation of scarce firm resources to CSR (i.e., governance, especially monitoring effectiveness) and carefully selected CSR activities to address the demands of key stakeholders (information acquisition) become crucial for firms to improve shareholder value (Porter & Kramer, 2006). Local institutional shareholders provide such monitoring effectiveness and broad information acquisition in nearby areas so that firms can effectively offer CSR to society.

This study proposes that the effective monitoring and information advantages of local institutional shareholders can help firms develop strategic intangibles such as reputational and relationship capital without incurring unnecessary costs (e.g., agency costs) regarding CSR and thus improve firm performance. Firms with higher local ownership have better internal governance and thus are more profitable (Chhaochharia et al., 2012). Better governance helps firms build their reputation, which plays a critical role in strategic marketing communications and helps win firms a competitive advantage in an increasingly crowded marketplace (Dolphin, 2004). Improved corporate reputation also increases employee retention, customer satisfaction, and customer loyalty (Chun, 2005). Shan and Tang (2023) show the positive impact of employee satisfaction on corporate productivity during Covid-19. In addition, better governance, along with CSR engagement, helps firms to reduce conflicts of interest - increase relationship capital - between managers and non-investing stakeholders (Harjoto & Jo, 2011a).

We use an extensive US mutual fund-firm dataset. Our sample consists of 1,351 local mutual funds and 2,279 unique firms for the sample period of 2005-2018, totalling 10,419 firm-year observations. Using a regression-based approach for a mediation research design, we find that local fund ownership in firms is positively related to firm performance. Geographical proximity between investors and their investments creates economic benefits because of information advantages and knowledge spillover (e.g., Coval & Moskowitz, 2001; Hwang, 2023). We also find that local fund ownership is positively related to CSR. Particularly, local funds are likely to improve environments, communities, and diversity-related social investments. Finally, it is evident that CSR mediates the relationship between local ownership and firm performance. We attribute this finding to the distinctive characteristics of local institutional shareholders, such as monitoring and information advantages when it comes to uncertain social and environmental investments. This paper sheds light on the positive impact of proximity in corporate ownership on firm performance through CSR practices.

This paper contributes to the corporate governance literature that relates ownership structure to CSR. Governance mechanisms play a critical role in CSR practices (Arora & Dharwadkar, 2011; Harjoto & Jo, 2011b). Specifically, ownership structure influences a firm's CSR activities (Dam & Scholtens, 2013; Li & Zhang, 2010; Oh et al., 2011; Oh et al., 2017). Since investors have varying preferences regarding CSR engagement, complex ownership structures create conflicts among shareholders regarding CSR (Barnea & Rubin, 2010). Local shareholders can understand their communities better and are closer to stakeholders such as employees and customers. With a strong relationship with stakeholders, local shareholders can help firms meet the needs of stakeholders more strategically. This study provides evidence that local shareholders tend to promote a firm's CSR activities, especially in the areas of environment, communities, and diversity, leading to higher firm performance.

This study also contributes to the economic geography literature that emphasises the significance of local knowledge and path dependence in economics and geography (e.g., Clark, 2018).

Geographical proximity between investors and their investments creates economic benefits because of information advantages and knowledge spillover (e.g., Coval & Moskowitz, 2001; Hau, 2001; Hwang, 2023; Kim et al., 2023; Malloy, 2005; Teo, 2009). Regulatory environments also discourage investor allocation decisions far from home (Akisik, 2020; Shima & Gordon, 2011). Leuz et al. (2009) find that foreign investments are less likely in countries with weak disclosure rules and poor shareholder protection, which decreases transparency and increases information asymmetries. However, local investors are familiar with the regulatory environment and disclosure policies, enabling them to lower information costs and monitor their firms more effectively under severe information asymmetry. The advantages of local shareholders also apply to a firm's CSR investments. This paper provides additional evidence that local shareholders promote CSR and, thereby, increase firm performance.

2. Literature Review and Theory

2.1 Local Ownership and Firm Performance

How corporate ownership structure affects firm performance dates back to Berle and Means (1932), who suggest that ownership dispersion is negatively related to firm performance. The idea is that at least some monitoring by informed shareholders is necessary to prevent agency problems, where self-interested managers undertake suboptimal decisions, a topic that has been extensively investigated in the literature (Himmelberg et al., 1999; McConnell & Servaes, 1990; Morck et al., 1988).

Previous studies suggest that local shareholders are informed and better at monitoring proximate firms since their cost of acquiring monitoring information is low relative to distant shareholders (Ayers et al., 2011; Dyer, 2021; Dyer et al., 2021). Chhaochharia et al. (2012) also find that firms with high local ownership have better internal governance and are more profitable. Finally, Hwang (2023) shows that firms with greater local ownership produce more patents and patents with a bigger impact, leading to better performance. On the other hand, the ownership structure is endogenous at best, and equilibrium ownership patterns depend on their relative costs and benefits (Demsetz, 1983; Demsetz & Lehn, 1985). Therefore, we propose our baseline hypothesis that local ownership is positively related to shareholder value (firm performance).

2.2 The Mediation Effect of CSR on the Relationship between Local Ownership and Firm Performance

That ownership structure tends to influence corporate investment and policies in various ways is based on the notion that different types of owners have divergent preferences regarding various corporate decisions and investments (e.g., Barnea & Rubin, 2010; Cho, 1998). Oh et al. (2011) document that different owners have differential impacts on a firm's CSR engagement. Consistent with previous literature, we perceive CSR as a type of investment, and different types of investors will have different effects as the social investments are the results of managerial decisions under pressure from shareholders. We argue that local shareholders play a critical role in CSR engagement. Local shareholders reside in the community where their firms operate. Husted et al. (2017) suggest that CSR activities are mainly developed close to the firm's location. Attig and Brockman (2017) also find that characteristics of local residents play a significant role in determining a firm's CSR. Therefore, we expect that the presence of local shareholders influences a firm's CSR initiatives.

Whether CSR practices help firms improve their performance is under debate (Mackey et al., 2007). Previous literature finds the relationship inconclusive, such as no relationship (McWilliams & Siegel,

2000), a positive relationship (Waddock & Graves, 1997), and a negative relationship (Wright & Ferris, 1997). On the one hand, CSR may lead managers to pursue personal value, causing agency costs and deteriorating firm value (Masulis & Reza, 2015). The argument is consistent with agency theory (Jensen & Meckling, 1976). CEO characteristics, ability, and power influence strategic decisions in CSR. Less able CEOs over or underinvest in an opportunistic way for personal benefit at shareholders' expense (Garcia-Sanchez & Martinez-Ferrero, 2019). CEOs may face pressure from institutional environments such as government regulations for CSR investments (Gupta & Chakradhar, 2022). Firms may suffer from possible misappropriation and misallocation of scarce resources (Garriga & Melé, 2004; Margolis & Walsh, 2003).

On the other hand, CSR could lead to higher firm performance. Al-Shammari et al. (2022) show that a firm's CSR is positively related to firm performance, especially for firms with high R&D and operational capabilities. This is consistent with the suggestion of Hasan et al. (2018) that CSR helps firms develop intangibles such as total factor productivity (TFP) and thereby improves firm performance. Traditional economic theories suggest that managers should pursue the best interest of shareholders, i.e., shareholder value maximisation (Friedman, 1962). Some argue, however, that maximising shareholder value is shortsighted; instead, a firm should improve stakeholder value for long-term survival and profitability (Clarkson, 1995; Freeman, 1984; Paine, 2002). Instrumental stakeholder theory (IST) provides a theoretical resolution to this conflict in that the engagement of stakeholders could also improve shareholder value (Jones, 1995). IST considers the performance consequences for firms of highly ethical relationships with stakeholders such as trust, cooperation, and information sharing (Jones et al., 2018). Garriga and Melé (2004) argue that corporations utilise CSR as a strategic tool to promote economic objectives for wealth creation. Jones et al. (2018), however, questioned why, then, the IST-based stakeholder treatment does not dominate any form of stakeholder relationship. They suggest costs associated with pursuing stakeholder relationships as a main reason. We propose that local shareholders, as effective monitors, could reduce such costs - agency costs and misappropriation and misallocation of resources - and improve firm performance.

Local shareholders are effective monitors of corporate behaviour and actively participate in firm operations through corporate governance (Chhaochharia et al., 2012; Hwang, 2023). Firms with high local ownership have better internal governance (Lerner, 1995). Consequently, managers of high local ownership firms are less likely to engage in empire building and are unlikely to enjoy the quiet life. These findings suggest that local shareholders could prevent managers from investing in CSR for their own profits and help avoid agency costs.

In addition to the monitoring effectiveness, local shareholders could have frequent face-to-face meetings with executives, visit product facilities, speak with employees, and understand the local economy better, which alleviates communication costs as well as information gathering costs (Coval & Moskowitz, 1999). With the information acquisition activities, local shareholders understand the firm's investments (e.g., CSR) better, helping managers to get required shareholder support. Finally, local shareholders are more likely to participate in community networks and spread news of the firm's social efforts and community relations. These activities by local shareholders help firms develop strategic intangibles such as reputational and relationship capital without incurring unnecessary costs (e.g., agency costs) regarding CSR. Increasing awareness of a firm's effort for community investment eventually benefits the firm financially.

3. Data and Methodology

Our empirical analysis draws upon data from various sources such as financial accounting data from Compustat, market data, and mutual fund characteristics from the Center for Research in Security Prices (CRSP), CSR data from Morgan Stanley Capital International (MSCI) ESG, and mutual fund holdings and institutional ownership data from Thomson Reuters. The Securities and Exchange

Commission (SEC) requires an institutional investment manager who exercises investment discretion over \$100 million or more in Section 13(f) securities to report their holdings on Form 13F. The CRSP database is most widely used in this research field, although an omission bias problem was reported (Elton et al., 2001). Utilising MSCI ESG, we generate CSR scores founded on seven dimensions: community, corporate governance, diversity, employee relations, environment, human rights, and product. MSCI ESG assesses firms' strengths and concerns of CSR behaviours by assigning binary scores on seven dimensions (MSCI, 2015). In line with previous studies (e.g., Kotchen and Moon, 2012), we calculate a net CSR score as the sum of CSR strengths minus the sum of CSR concerns. MSCI ESG data has its own weaknesses due to changes in data collection after Kinder, Lydenberg, Domini (KLD) was acquired by MSCI, such that new KLD data are not directly comparable with historical KLD data from before 2010 (Eccles et al., 2020; MSCI, 2015). To make a net CSR measure comparable between years, we measure the standardised CSR as a net CSR for each firm per year, minus their means across firms for the same year, divided by their standard deviations (Kotchen & Moon, 2012).

To identify local institutional shareholders and their ownership in sample firms, we calculate actual distances between mutual funds and their portfolio firms based on the addresses of their headquarters. We define local institutional shareholders as mutual funds investing in a firm within 100 kilometres of their headquarters (Coval & Moskowitz, 2001). This selection process yields a final sample of 1,351 local mutual funds and 2,279 unique firms for the sample period of 2005-2018. Table 1 reports descriptive statistics for CSR and local ownership variables as well as control variables relating to firm characteristics. *Local* measures the ownership interest of local funds, while *Local/Total* represents local funds' ownership relative to overall institutional ownership. All other variables, including control variables, are detailed in Table 2.

Table 1: Descriptive Statistics

Variables	N	Mean	Q1	Median	Q3	SD	Skew	Kurt
CSR	10,419	-0.0230	-0.6221	-0.1955	0.3601	1.0149	1.5800	8.2194
Local	10,419	0.0108	0.0000	0.0000	0.0089	0.0233	3.1680	15.5381
Local/Total	10,419	0.0143	0.0000	0.0000	0.0119	0.0312	3.4380	19.5360
Tobin's Q	10,419	0.0000	-0.6503	-0.3135	0.2818	0.9996	2.1337	8.6227
Log (Size)	10,419	7.7509	6.5481	7.6321	8.8306	1.6696	0.3724	2.8868
BM	10,419	0.5101	0.2426	0.4300	0.6903	0.4183	1.4512	7.1384
Leverage	10,419	0.2550	0.0634	0.2254	0.3858	0.2205	0.8811	3.4318
ROA	10,419	0.0246	0.0083	0.0382	0.0756	0.1175	-2.8241	14.8384
DACC	10,419	0.1096	0.0282	0.0684	0.1422	0.1241	2.2639	9.0332
CAPEX	10,419	0.0854	0.0166	0.0323	0.0655	0.1882	5.1740	33.7881
Liquidity	10,419	14.4526	14.0440	14.4700	14.9051	0.6970	-0.3346	3.5034
Competition	10,419	-0.0713	-0.0800	-0.0511	-0.0318	0.0692	-3.3850	19.0066
Litigation	10,419	0.2247	0.0000	0.0000	0.0000	0.4174	1.3186	2.7389
Fin	10,419	0.0048	-0.0416	-0.0044	0.0226	0.1117	1.8724	10.3106
Global	10,419	0.5709	0.0000	1.0000	1.0000	0.4949	-0.2865	1.0820
IO	10,419	0.7418	0.6171	0.7989	0.9146	0.2445	-0.8056	3.9290

Table 2: Variable Definitions

Variable Names	Variable Definitions
Local	The natural logarithm of one plus the number of shares of a firm held by mutual funds located within 100 kilometres of the firm's headquarter, divided by the firm's total shares outstanding (Coval & Moskowitz, 1999, 2001)
Local/Total	The natural logarithm of one plus local ownership divided by overall institutional ownership (Coval & Moskowitz, 1999, 2001)
CSR	The standardised score of a firm's corporate social responsibility (CSR) rating, per Kotchen and Moon (2012). It is calculated as total strengths minus total concerns of CSR for each company each year, subtracting the mean across companies for the same year, and divided by the standard deviation on seven social rating categories: community, corporate governance, diversity, employee relations, environment, human rights, and product (MSCI ESG).
Size	The total assets (in millions) (Compustat AT) (Dyck et al., 2019)
BM	Ratio of book value of equity to market value of equity (Compustat CEQ/(PRCC_F*CSHO)).
Leverage	The debt-to-asset ratio (Compustat (DLC+DLTT)/AT) (Dyck et al., 2019)
Tobin's Q	The market-to-book ratio for a firm's resources, defined in CRSP/Compustat codes calculated as, (PRCC_F*CSHO+LT)/(CEQ+LT) (Dyck., et al., 2019)
OCF	Operating cash flow scaled by total assets (Compustat OANCF/AT)
ROA	Earnings before interest, taxes, depreciation, and amortisation (Compustat EBITDA), divided by the firm's average total assets (Compustat AT) (Dhaliwal et al., 2011).
DACC	The absolute value of performance-adjusted discretionary accruals (Kothari et al., 2005). It adds $ROA_{i,t}$ to the modified Jones model to account for the effectiveness of performance. $TA_{i,t} = \delta_0 + \delta_1 \left(\frac{1}{ASSETS_{i,t-1}} \right) + \delta_2 \Delta SALES_{i,t} + \delta_3 PPE_{i,t} + ROA_{i,t} + v_{i,t}$ where $TA = (\Delta CA - \Delta CL - \Delta Cash + \Delta STD - Depreciation)$; ΔCA is the change in current assets; ΔCL is the change in current liabilities; $\Delta Cash$ is the change in cash and cash equivalents; ΔSTD is the change in debt that is included in current liabilities; Depreciation is depreciation and amortisation expense; all scaled by lagged total assets. $ASSETS$ is total assets. $\Delta SALES$ is the change in sales revenues scaled by lagged total assets. PPE is gross property, plant, and equipment scaled by lagged total assets. ROA is income before extraordinary items scaled by lagged total assets.
CAPEX	Capital expenditures scaled by total assets (Compustat CAPX/AT). (Byun & Oh, 2018)
Firm Age	The number of years since firm inception (CRSP). (Byun & Oh, 2018)
IO	Institutional ownership (Dyck et al., 2019)
Liquidity	The ratio of the number of shares traded in the year to the total shares outstanding at the year-end (Dhaliwal et al., 2011).
Litigation	An indicator variable that equals 1 if a firm operates in a high-litigation industry, defined based on SIC codes of 2833–2836, 3570–3577, 3600–3674, 5200–5961, and 7370 (Dhaliwal et al., 2011).
Competition	Equals to the Herfindahl-Hirschman Index multiplied by -1 (Dye, 1985).
FIN	The sale of common and preferred shares minus the purchase of common and preferred shares (Compustat SSTK-PRSTKC) plus the long-term debt issuance minus the long-term debt reduction (Compustat DLTIS-DLTR) scaled by total assets at the beginning of the year (Compustat AT) (Dhaliwal et al., 2011).
Global	An indicator variable that equals 1 if a firm reports foreign income (Compustat PIFO) (Dhaliwal et al., 2011).

4. Empirical Results

We first examine the association between local institutional ownership and firm performance using the following model specification:

$$Tobin's\ Q_{f,t} = \alpha + \beta Local_{f,t-1} + \gamma Controls_{f,t-1} + FE_{f,t} + \varepsilon_{f,t}, \quad (1)$$

where f and t index the firm and year, respectively. Table 3 reports the panel instrumental variable regressions with two-way clustered errors for local shareholders on Tobin's Q. This method is widely applied to panel data estimations to correct potentially biased OLS standard errors due to cross-sectional and serial correlations (Sun et al., 2018). Our measure of firm performance is Tobin's Q, which represents investors' expectations about the risk-adjusted future cash flows of a firm (Anderson & Reeb, 2003). The results show that local ownership is positively related to firm performance. The magnitude of the coefficient estimates, 1.7955 and 1.2355, suggests that a one standard deviation increase in local ownership and local ownership relative to overall institutional ownership are associated with a 4.1% and a 3.75% increase in Tobin's Q, respectively.

Table 3: The Effects of Local Fund Ownership on Firm Performance (Tobin's Q)

	Tobin's Q _t	Tobin's Q _t
Local _{t-1}	1.7955** (2.55)	
Local/Total _{t-1}		1.2355** (2.28)
Log(Size _{t-1})	-0.1171*** (-16.42)	-0.1170*** (-16.41)
BM _{t-1}	-0.9620*** (-8.34)	-0.9618*** (-8.35)
Leverage _{t-1}	-0.9214*** (-10.54)	-0.9210*** (-10.51)
CAPEX _{t-1}	0.1392** (2.47)	0.1408** (2.51)
Liquidity _{t-1}	0.0686** (2.40)	0.0688** (2.40)
Competition _{t-1}	0.3953*** (2.64)	0.3912*** (2.62)
IO _{t-1}	-0.0869 (-1.31)	-0.0733 (-1.14)
Cons	0.4950 (1.10)	0.4769 (1.06)
Firm Fixed Effects	Yes	Yes
Industry Fixed Effects	Yes	Yes
Year Fixed Effects	Yes	Yes
N	10,419	10,419
R ²	0.4311	0.4310
Adjusted R ²	0.4181	0.4302

Note: The t-statistics are reported in parentheses. ***, **, and * denote significant levels of 1%, 5%, and 10%, respectively.

We also examine the association between local institutional ownership and CSR performance using the following model specification:

$$CSR_{f,t} = \alpha + \beta Local_{f,t-1} + \gamma Controls_{f,t-1} + FE_{f,t} + \varepsilon_{f,t}, \quad (2)$$

where f and t index the firm and year, respectively. Table 4 reports the results of panel instrumental variable regressions with two-way clustered errors. The coefficient estimates of Local and Local/Total are positive and significant with CSR at the 5% and 1% levels, respectively. The coefficient estimate of 0.7875 (0.7672) suggests that a one percentage point increase in local ownership raises CSR by around 78% (104%) from the mean. Our measure of local investors is consistent with Coval and Moskowitz (1999, 2001) and Hwang (2023). We define local investors as those investing in a firm within 100 kilometres of their headquarters. Coval and Moskowitz (1999, 2001) suggest a 100-km metric among several location metrics that, in most cases, are qualitatively and quantitatively similar. However, the boundary of locality could vary. Therefore, we consider an alternative local measure, $SLocal$, which is the percentage of a firm's shares held by mutual funds located within the same state as the firm (Chhaochharia et al., 2012). $SLocal$ is the natural logarithm of one plus a firm's shares held by mutual funds located within the same state as the firm, divided by the firm's total shares outstanding. With the alternative measure, our results remain consistent. In Table 5, we report the empirical result of the relationship between local fund ownership and CSR components. Particularly, local funds are likely to improve environments, communities, and diversity-related social investments.

Table 4: The Effects of Local Fund Ownership on CSR

	CSR _t	CSR _t	CSR _t
Local _{t-1}	0.7875** (2.05)		
Local/Total _{t-1}		0.7672*** (2.60)	
Slocal _{t-1}			1.7710*** (4.26)
Log(Size _{t-1})	0.2481*** (6.37)	0.2483*** (6.38)	0.2463*** (6.67)
BM _{t-1}	-0.2288*** (-5.71)	-0.2280*** (-5.70)	-0.2245*** (-5.94)
Leverage _{t-1}	-0.4524*** (-12.48)	-0.4508*** (-12.34)	-0.4426*** (-12.96)
ROA _{t-1}	0.0332 (0.22)	0.0342 (0.23)	0.0357 (0.25)
DACC _{t-1}	0.3351*** (3.82)	0.3356*** (3.83)	0.3441*** (4.19)
CAPEX _{t-1}	-0.1759*** (-3.62)	-0.1745*** (-3.63)	-0.1405** (-3.10)
Liquidity _{t-1}	-0.0859*** (-3.26)	-0.0856*** (-3.25)	-0.0862** (-3.27)
Competition _{t-1}	0.5913*** (3.00)	0.5854*** (2.96)	0.4888** (2.39)
Litigation _{t-1}	0.3471*** (13.38)	0.3472*** (13.31)	0.3315*** (13.40)
FIN _{t-1}	-0.2958*** (-3.74)	-0.2970*** (-3.77)	-0.2789*** (-3.70)
Global _{t-1}	0.1077*** (7.62)	0.1075*** (7.64)	0.1101*** (7.74)
IO _{t-1}	-0.2528*** (-5.23)	-0.2443*** (-5.41)	-0.2553*** (-4.93)
Cons	-0.3700 (-0.86)	-0.3858 (-0.89)	-0.3922 (-0.96)
Firm Fixed Effects	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
N	10,419	10,419	10,419
R ²	0.1529	0.1531	0.1519
Adjusted R ²	0.1519	0.1520	0.1519

Note: The t-statistics are reported in parentheses. ***, **, and * denote significant levels of 1%, 5%, and 10%, respectively.

Table 5: The Effects of Local Fund Ownership on CSR Components

Variable	Community	Environment	Employee relations	Human rights	Corporate governance	Diversity	Product
Local _{t-1}	1.1393*** (5.22)	1.0436*** (2.92)	-0.6244 (-1.35)	-0.3049 (-0.80)	0.7325** (-2.01)	0.8891*** (4.00)	-0.1448 (-0.56)
Log(Size _{t-1})	0.1299*** (4.10)	0.2370*** (5.41)	0.1747*** (4.00)	-0.0532* (-1.96)	-0.0548 (-1.60)	0.3048*** (8.48)	-0.1467*** (-4.84)
BM _{t-1}	-0.0821*** (-3.19)	-0.1095*** (-3.09)	-0.1223*** (-4.18)	0.0350 (1.07)	0.0279 (0.84)	-0.1595*** (-5.22)	-0.0410 (-1.43)
Leverage _{t-1}	-0.2112*** (-4.31)	-0.1443*** (-3.09)	-0.2934*** (-6.52)	0.0425 (1.03)	0.0037 (0.05)	-0.3612*** (-11.95)	0.0498 (1.44)
ROA _{t-1}	-0.1967 (-1.75)	-0.0308 (-0.32)	0.3476** (2.45)	-0.3208* (-1.70)	0.1992 (1.61)	-0.5392*** (-6.19)	0.1289 (1.01)
DACC _{t-1}	-0.0950 (-0.83)	0.2563* (1.84)	0.4664*** (7.01)	-0.0603 (-0.62)	0.0093 (0.08)	0.0528 (0.50)	0.0642 (0.92)
CAPEX _{t-1}	-0.1960*** (-3.29)	-0.0187 (-0.15)	0.0867 (1.02)	0.1603 (1.12)	-0.0525 (-0.99)	-0.1749*** (-5.98)	0.1507*** (3.31)
Liquidity _{t-1}	-0.0439** (-2.39)	-0.0886*** (-3.08)	-0.0838** (-2.39)	-0.0174 (-0.86)	-0.1291*** (-2.93)	0.0562*** (2.66)	-0.0024 (-0.10)
Competition _{t-1}	1.3635*** (4.33)	0.5575** (2.49)	-1.2852*** (-4.98)	1.5545*** (3.48)	1.3419*** (3.45)	0.2831 (1.11)	0.9661*** (4.19)
Litigation _{t-1}	0.1887*** (3.29)	0.1277* (1.81)	0.4411*** (10.82)	-0.0843*** (-3.30)	-0.1548*** (-5.12)	0.3448*** (10.76)	0.1243** (1.99)
FIN _{t-1}	-0.1464* (-1.81)	-0.3118*** (-5.42)	-0.2733** (-2.21)	-0.2351** (-2.01)	0.2165** (2.42)	-0.2305* (-1.95)	0.0969 (1.01)
Global _{t-1}	0.0230 (0.64)	-0.0045 (-0.19)	-0.0486* (-1.81)	-0.0194 (-0.54)	-0.0596 (-1.56)	0.0275*** (2.82)	-0.0002 (-0.01)
IO _{t-1}	-0.1225** (-2.49)	-0.2028* (-1.85)	-0.1419*** (-2.73)	0.1737*** (3.13)	0.0007 (0.01)	-0.3373*** (-3.18)	0.1048** (2.42)
Cons	-0.1977 (-0.61)	0.1420 (0.27)	-0.7837** (-2.02)	-0.8247 (-1.01)	2.6449** (2.53)	-3.0555*** (-7.79)	0.6959 (1.40)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	10,419	10,419	10,419	10,419	10,419	10,419	10,419
R ²	0.1848	0.1785	0.1291	0.0771	0.0464	0.2488	0.0937
Adjusted R ²	0.1839	0.1779	0.1308	0.0771	0.0462	0.2475	0.0931

Note: The t-statistics are reported in parentheses. ***, **, and * denote significant levels of 1%, 5%, and 10%, respectively.

We then investigate the impact of local ownership on firm performance and the mediation effect of CSR on the relationship between local ownership and firm performance. Consistent with the approach by Baron and Kenny (1986), we test the following specifications. First, we run a regression of local ownership on firm performance. Next, we estimate the effects of CSR on firm performance. Lastly, we regress both local ownership and CSR against firm performance to examine a possible mediation effect of CSR.

Table 6 reports the regression results. Columns (1) and (2) are the results of regression for the relationship between local ownership and firm performance from Table 3. Local ownership is positively related to firm performance. Column (3) shows the positive impact of CSR on firm performance, which is statistically significant at the 1% level. The coefficient estimate of CSR, 0.0722, indicates that one standard deviation increase in CSR is associated with a 7% increase in Tobin's Q. Finally, Columns (4) and (5) report the mediation effects of CSR on the relation between local ownership and firm performance. In the presence of CSR, the coefficient of local ownership is positive but statistically insignificant, suggesting that the positive impact of local ownership on firm performance is fully mediated by CSR.

Table 6: The Mediation Effect of CSR

	(1)	(2)	(3)	(4)	(5)
Local _{t-1}	1.7955** (2.55)			1.0296 (1.60)	
Local/Total _{t-1}		1.2355** (2.28)			0.6690 (1.32)
CSR _{t-1}			0.0722*** (4.76)	0.0722*** (4.73)	0.0721*** (4.75)
Log(Size _{t-1})	-0.1171*** (-16.42)	-0.1170*** (-16.41)	-0.1215*** (-8.86)	-0.1215*** (-8.98)	-0.1213*** (-9.02)
BM _{t-1}	-0.9620*** (-8.34)	-0.9618*** (-8.35)	-0.9924*** (-8.87)	-0.9905*** (-8.27)	-0.9905*** (-8.27)
Leverage _{t-1}	-0.9214*** (-10.54)	-0.9210*** (-10.51)	-1.0089*** (-8.10)	-1.0270*** (-7.95)	-1.0270*** (-7.93)
CAPEX _{t-1}	0.1392** (2.47)	0.1408** (2.51)	0.0763 (1.04)	0.0797 (1.09)	0.0809* (1.11)
Liquidity _{t-1}	0.0686** (2.40)	0.0688** (2.40)	0.0541 (1.58)	0.0675** (1.98)	0.0677** (1.98)
Competition _{t-1}	0.3953*** (2.64)	0.3912*** (2.62)	0.2287 (1.09)	0.1635 (0.73)	0.1592 (0.72)
IO _{t-1}	-0.0869 (-1.31)	-0.0733 (-1.14)	-0.0197 (-0.22)	-0.0585 (-0.63)	-0.0441 (-0.49)
Cons	0.4950 (1.10)	0.4769 (1.06)	0.7468 (1.36)	0.5465 (0.97)	0.5278 (0.94)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	10,419	10,419	10,419	10,419	10,419
R ²	0.4311	0.4310	0.4139	0.4166	0.4164
Adjusted R ²	0.4181	0.4302	0.4136	0.4172	0.4165

Note: The t-statistics are reported in parentheses. ***, **, and * denote significant levels of 1%, 5%, and 10%, respectively.

Our finding of the relation between local ownership and CSR could be spurious due to endogeneity issues such as simultaneity, reverse causality, and omitted variables. To address potential endogeneity issues, first, we use one-year lagged independent variables to alleviate the reverse causality issue (Garcia-Castro & Francoeur, 2016). Second, we added firm-fixed effects and year-fixed effects following Antonakis et al. (2014). In regression analysis, omitted variable observation will

be an issue if unobserved characteristics correlate with our CSR measure but are not included in the model. Firm-fixed effects, added in our model, therefore, resolve the omitted observation issue by accounting for micro-level unobservable and time-invariant heterogeneity across firms in all models (Antonakis et al., 2014). Furthermore, we added year-fixed effects to account for global economic and financial shocks and timely trends as well.

5. Conclusion

Prior studies provide evidence of an economic benefit of geographical proximity between investors and firms such as mutual fund performance, proprietary trading profits, hedge fund performance, and equity analysis, especially a positive effect of local ownership on firm performance due to greater corporate innovation and better internal governance. This paper uncovers the impact of local institutional shareholders on firm performance by investigating the mediating role of corporate social responsibility (CSR) in the local ownership and firm performance relationship. We argue that the monitoring effectiveness and information advantage of local shareholders can ensure that firms develop reputational and relationship capital through corporate social responsibility (CSR) activities that lead to higher firm performance. Consistent with our expectation, higher local ownership results in greater CSR investments and, thereby, increases firm performance. Our results are consistent with instrumental stakeholder theory that a firm should consider the interests of its stakeholders for strategic and instrumental reasons, primarily to enhance its long-term sustainability and profitability. The findings suggest that better governance and greater information regarding stakeholders could not only improve a firm's reputation and relationships with stakeholders through CSR but also help benefit firm performance. Finally, our study acknowledges some limitations related to US-specific data. Differences in institutional environments at the country level and globally diversified portfolios may impact a firm's CSR policy.

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