



WINPEC Working Paper Series No.E2117  
September 2021

# **Is Social Capital Valuable? Evidence from Mergers and Acquisitions**

Jo-Ann Suchard and Giang Nguyen and Yuelin Wang

Waseda INstitute of Political EConomy  
Waseda University  
Tokyo, Japan

# Is Social Capital Valuable? Evidence from Mergers and Acquisitions

Jo-Ann Suchard<sup>\*</sup>  
University of  
New South Wales

Giang Nguyen<sup>†</sup>  
Waseda University

Yuelin Wang<sup>‡</sup>  
Waseda University

## Abstract

Using comprehensive social capital data of U.S. counties from the Social Capital Project, we show evidence that the county-level social capital where the acquirer is located is positively related to the acquirer's announcement returns. This finding withstands alternative model specifications and remains robust to endogeneity concerns. We also document that social capital has a more pronounced effect on the acquirer's announcement returns when the supermajority to approve a merger, acquirer size, the deal size, and the ratio of stock payment are larger and the percentage of blockholder ownership is smaller. Additionally, we find that social capital creates more synergies, enhances acquirers' long-term performance, and shortens deal completion duration. Overall, our results support the shareholder value maximization view that social capital constrains managerial opportunistic and self-serving behaviors, which leads to better acquisition outcomes.

**Keywords:** *Social Capital, Merger and Acquisition, Shareholder Value Maximization.*

**JEL Classification:** G34, Z13.

---

<sup>\*</sup> UNSW Business School, University of New South Wales Sydney. Email: j.suchard@unsw.edu.au

<sup>†</sup> School of Political Science and Economics, Waseda University. Email: giangnguyen@aoni.waseda.jp

<sup>‡</sup> School of Political Science and Economics, Waseda University. Email: wangyuelin@asagi.waseda.jp

# Is Social Capital Valuable? Evidence from Mergers and Acquisitions

## Abstract

Using comprehensive social capital data of U.S. counties from the Social Capital Project, we show evidence that social capital has a positive effect on the acquirer's announcement returns. The finding remains robust to alternative model specifications and endogeneity concerns. We also document that the effect is more pronounced when the supermajority required to approve a merger, the acquirer size, the deal size, and the ratio of stock payment are larger, or when the percentage of blockholder ownership is smaller. Additionally, the findings indicate that social capital creates more synergies, enhances the acquirer's long-term performance, and shortens the deal duration. Overall, the results are consistent with the shareholder value maximization view that social capital constrains managerial opportunistic and self-serving behaviors in the acquiring firm, which leads to better acquisitions that benefit acquirer shareholders.

**Keywords:** *Social Capital, Merger and Acquisition, Shareholder Value Maximization.*

**JEL Classification:** G34, Z13.

This draft August 11, 2021

## **1. Introduction**

There exists broad literature examining the impacts of social capital on economic outcomes. Hasan, He, and Lu (2021) document evidence that social capital affects the trustworthiness of trustees and the trust propensity of trustors in the context of peer-to-peer lending. Lins, Servaes, and Tamayo (2017) emphasize the value of social capital to firms during the 2008-2009 financial crisis, documenting that high social capital firms have higher profitability, gross margins, and sales growth. Social capital also reduces executive compensation (Hoi, Wu, & Zhang, 2019), decreases corporate leverage (Huang & Shang, 2019), and lowers firms' cost of equity (Gupta, Raman, & Shang, 2018). While the literature shows the effect of social capital on corporate practices, there is limited evidence on its effect on the outcomes of mergers and acquisitions (M&As), one of the largest and most important corporate investment decisions. In this paper, we explore the benefits of social capital for the acquiring firms in M&As.

Social capital is characterized by societal relationships, connections, and norms that engender mutual trust and cooperation (Coleman, 1988; Guiso, Sapienza, & Zingales, 2011; Hasan, Hoi, Wu, & Zhang, 2017b; Hasan et al., 2021; Putnam, Leonardi, & Nanetti, 1994). Guiso et al. (2011) and Hasan et al. (2017b) define social capital as the confluence of effects generated by social networks and cooperative norms. By this definition, social capital has been shown to limit opportunistic behaviors, encourage cooperation, and mitigate agency problems, generating positive economic outcomes. For instance, Hasan,

Hoi, Wu, and Zhang (2017a) argue that social capital acts as a governance institution and limits self-serving behaviors by presenting evidence that firms headquartered in high social capital regions reduce tax avoidance, as shown by an increase in effective tax rates and cash effective tax rates, and a decrease in discretionary permanent book-tax difference. Hoi et al. (2019) also find that social capital restrains managerial rent extractions by showing that high social capital environments reduce the levels of CEO compensation, CEO equity-based compensation, and the likelihood of opportunistic option grant awards. Accordingly, we conjecture that high social capital environments limit opportunistic and self-serving behaviors, mitigating agency problems in M&As (hereafter, the *shareholder value maximization view*), leading to an increase in the acquirer's announcement returns, improved synergies, better long-term operating performance, higher long-term stock returns, and shorter deal duration.

To test these hypotheses, we collect a large sample of 2,832 completed M&A deals in the U.S. spanning from 2010 to 2019 and use the county-level social capital index data from the Social Capital Project (SCP). Regression results show a positive relationship between the social capital of the county where the acquirer is located and the acquirer's announcement returns. This finding is statistically and economically significant. Specifically, one standard deviation increase in social capital results in a \$46.79 million increase in the gains of the acquirer's shareholders. We continue to support the *shareholder value maximization view* with empirical evidence emphasizing that the effect is more significant when agency problems are more severe, i.e., when the supermajority needed

to approve a merger, the acquirer's size, the deal size, and the ratio of stock payment are larger and the percentage of blockholder ownership is smaller.

To address endogeneity concerns caused by omitted variables, we carry out instrumental-variable 2-stage regression analyses using three groups of instrumental variables: (i) racial fragmentation and religiosity; (ii) Democratic state indicator and ethnic homogeneity; and (iii) racial fragmentation, religiosity, and Democratic state indicator. Our findings remain robust after controlling for endogeneity.

Our findings are also robust to the control of corporate social responsibility (CSR). Deng, Kang, & Low (2013) support the *stakeholder value maximization view* using CSR activities as a proxy for firm-level social capital. They document a positive effect of the acquirer's CSR activities on acquisition outcomes, suggesting high-CSR acquirers tend to maximize the stakeholder's value. Hence, there is a concern that firm-level CSR activities may represent a part of county-level social capital and drive the main findings. We, therefore, control for the acquirer's CSR scores in the baseline regression. We find that the effect of county-level social capital on the acquirer's announcement returns remains strong and statistically significant, emphasizing the support for the *shareholder value maximization view*. In addition, our main findings are not sensitive to the alternative measurements of the acquirer's announcement returns using different event window periods and alternative models, as well as the alternative measurements of social capital.

Additional analyses also present evidence for the positive relationship between social capital and transaction synergies. We also find that social capital leads to the

acquirer's better long-term operating performance and higher long-term stock returns, emphasizing the long-term value of social value to the acquirer. Finally, we show that social capital reduces the deal duration, consistent with the argument that managers of the acquirers located in high social capital counties exert greater efforts to complete the transactions. Overall, our findings support the *shareholder value maximization view* that managers of acquirers in high social capital regions tend to complete acquisitions that benefit shareholders.

The paper contributes to the broad literature that presents social capital as an important determinant of economic decisions and outcomes. Existing research focusing on the macro-level finds the enhancement effect of social capital on economic growth and investment (Guiso, Sapienza, & Zingales, 2009; Knack & Keefer, 1997; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1997; Zak & Knack, 2001). On the micro-level, social capital has been documented to affect stock market participation (Guiso, Sapienza, & Zingales, 2008), financial preferences of households (Guiso, Sapienza, & Zingales, 2004), firm valuation (Deng et al., 2013), and private loan contracts (Hasan et al., 2017b). We reveal the impact of social capital on the outcome of M&As.

We also add to the existing literature on external corporate governance (e.g., Giroud & Mueller, 2010; Straska & Waller, 2014). In high social capital environments, managers constrain themselves from self-serving and opportunistic behaviors and make value-added acquisitions. We complement research that identifies the role of social capital in mitigating agency problems in various contexts, including executive

compensations (Hoi et al., 2019), corporate leverage structure (Huang & Shang, 2019), cost of equity (Gupta et al., 2018), and debt contracting (Hasan et al., 2017b).

The rest of the paper proceeds as follows. Section 2 presents literature review and hypothesis development while Section 3 describes social capital measurements, the SCP, and data collection. Section 4 then discusses the effect of social capital on the acquirer's announcement returns. Section 5 provides the additional analyses, Section 6 shows the robustness tests, and Section 7 concludes the paper.

## **2. Literature Review and Hypothesis Development**

Literature shows evidence that M&As are often inefficient when they are driven by agency problems (Duchin & Schmidt, 2013; Jensen, 1986; Zhao, 2013). Thus, monitoring mechanisms are necessary to address the opportunistic and self-serving behaviors of the acquirer's managers (Chi & Lee, 2010). While traditional corporate governance literature discusses the role of takeover market and product market competition (Chi & Lee, 2010; Masulis, Wang, & Xie, 2007), we bring the attention to social capital, a collective of societal attributes that captures the benefits of social relationships, social networks, and cooperative societal norms, functions as an external monitoring mechanism, and acts as an effective deterrent for opportunistic and self-serving behaviors.

According to Hasan et al. (2017b) and Hoi et al. (2019), social capital captures the effects of close social relationships and strongly shared societal norms that encourage cooperation in society. More specifically, in environments with high social capital, the



existence of more connected social relationships, denser social networks, and more frequent social interactions will help communicate and enforce good codes of conduct (Coleman, 1988; Spagnolo, 1999). Consequentially, individuals are more likely to behave according to societal norms.

In addition, there are also high marginal costs and penalties for individuals breaching social norms in high social capital environments. In the corporate context, management-level staffs face significant penalties when they engage in socially unacceptable financial misbehaviors, such as restrictions in future employment, criminal charges, and other severe disciplinary actions (Fich & Shivdasani, 2007; Karpoff, Lee, & Martin, 2008; Srinivasan, 2005). There are also non-quantifiable costs such as external social sanctions in the form of social ostracism (Uhlener, 1989) and stigmatization (Posner, 2000) when others expose the misbehavior; and psychological costs such as negative moral sentiments, i.e., guilt and shame (Elster, 1989; Higgins, 1987; Mazar, Amir, & Ariely, 2008). Such anticipated marginal costs of misconduct are magnified in high social capital regions, and consequentially, individuals are more likely to behave and constrain opportunistic behaviors (Coleman, 1988; Elster, 1989; Hasan et al., 2017b).

We hypothesize that in a high social capital environment, managers are less likely to have opportunistic and self-serving behaviors, and they tend to behave in the interest of shareholders by making value-added acquisitions (the *shareholder value maximization view*). Hasan et al. (2017a) argue that civic norms cause managers to anticipate higher psychic costs and higher social sanctions when they avoid taxes. They show that being

headquartered in high social capital regions reduces tax avoidance behavior. Hasan et al. (2017b) perceive that social capital causes environmental pressure that constrains the firm's opportunistic behaviors, hence benefitting debt holders in the context of debt contracting as evidenced by the low spreads in bank loans and the low at-issue spreads in public debts. Hoi et al. (2019) present evidence that social capital mitigates the agency problems in CEO compensation. Huang and Shang (2019) document that social capital reduces firm leverage and short-term debt ratios. Gupta et al. (2018) present evidence that social capital lowers firms' cost of equity, and the effect is more significant when the firms experience less effective monitoring, i.e., firms operate in less product markets.

According to the *shareholder value maximization view*, we form the following testable predictions. First, acquirers located in counties with higher social capital tend to experience higher announcement returns as their managers refrain from opportunistic and self-serving behaviors and complete value-increasing deals that benefit the shareholders. Second, acquirers in high social capital regions experience larger transaction synergies. Jensen (1986), Scharfstein and Stein (2000), Shah and Thakor (1987), and Rajan, Servaes, and Zingales (2000), suggest that agency costs give rise to negative operational synergies. Li, Taylor, and Wang (2018) argue that opportunistic behaviors cause the highest-synergy bidder, i.e., the bidder who can generate the highest synergy with the target, to fail in acquiring the target, leading to inefficient M&As. Consistently, social capital, which mitigates agency problems, is positively associated with transaction synergies. Third, acquirers situated in areas with higher social capital tend to have a better deal selection and target assessment, leading to enhanced long-term performance,

more specifically, higher long-term operating performance and better long-term stock returns. Finally, the managers of acquirers in high social capital regions tend to exert more effort to complete the transaction, suggesting a negative relationship between social capital and deal duration.

### **3. Data Collection and Summary Statistics**

#### *3.1. Social Capital Measurements and the Social Capital Project*

There have been several attempts to define and measure social capital in the literature. Hasan, He, and Lu (2020) note that social capital can arise and accumulate at the individual, institutional, and societal levels. Additionally, Lins et al. (2017) document that there are two approaches to measure social capital: (i) At the societal level and applied to individual members of that society; (ii) At the corporate level. The former is usually measured at the nation, state, or county level (Gupta et al., 2018; Hasan et al., 2017b; Hoi et al., 2019). Meanwhile, the latter is either captured by the social networks of the firm's management or CSR activities (Deng et al., 2013; Lins et al., 2017; Sacconi & Antoni, 2010).

As the corporate level measurements of social capital have limitations in capturing the multi-dimension concept of social capital (Lins et al., 2017), we attempt to use social capital at the broader societal level (county-level) and measures from the Social Capital Project (SCP), a project of the United States Congress Joint Economic Committee<sup>1</sup>. The

---

<sup>1</sup> The data can be obtained from the official website of the Social Capital Project. <https://www.lee.senate.gov/public/index.cfm/scp-index>

county-level social capital index (*SC index*) has four dimensions, comprised of three sub-indexes and one standalone indicator: (i) Family Unity Subindex; (ii) Community Health Subindex; (iii) Institutional Health Subindex; and (iv) Collective Efficacy. The details of each subindex are described in Appendix A. Importantly, Principal Components Analysis (PCA) was used to generate weights for each dimension to create the final index. As the data were summarized and reported in April 2018, we follow Gompers, Ishii, and Metrick (2003), Hasan et al. (2017b), Hilary and Hui (2009), and Hoi et al. (2019) and fill our sample period of 2010 to 2019 with the latest measurement.

The SCP's measurement of social capital shows clear improvements compared to other societal level measures. First, at the state level, Putnam (2000) index and the General Social Survey (GSS) index are commonly used. Relative to these measures, the SCP SC index employed the PCA method so that the weight of indicators indicates the extent to which the indicators reflected the concept embodied in the subindex, hence ensuring greater representability of the data. Second, the SCP SC index makes use of higher quality data, i.e., the data used to generate the SCP SC index is more recent and updated<sup>2</sup>. Third, the county-level SCP SC index is representative of the diversity in social capital within states. Figures B1 and B2 present the spatial distribution of *SCAPITAL* at the county level and the state level, respectively. From Figure B1, we can conclude that the social capital

---

This county-level index provides social capital scores for 2,992 of 3,142 counties, containing 99.7% of the American population. It is generated using ten indicators collected from various data sources dated between 2008 and 2016, primarily from 2013.

<sup>2</sup> Data used in the Putnam (2000) index, for example, only covered the period from 1975, the 1980s, and the first half of the 1990s.

of counties within states varies to a significant extent<sup>3</sup>. Thus, measuring social capital at the county level will provide more meaningful analysis results.

In terms of county-level data, one of the most influential and widely used social capital indexes is the Penn State Index. However, this index has shortcomings. When benchmarked against 50 benchmark indicators, the correlation of the SCP SC index correlates strongly (above 0.5 or below -0.5) for 17 indicators, while the Penn state index does not show strong correlations. The Penn State index also fails to account for variables relevant to social capital such as family health, the level of volunteering, charitable donation, informal community engagement, social support, or collective efficacy.

### *3.2. Data Collection of Mergers and Acquisitions*

To empirically test the *shareholder value maximization view* mentioned in Section 2, we collect 2,832 completed M&A deals between 2010 to 2019 from the Thomson SDC database. Then, we impose the following screening criteria: (i) both the acquirer and the target are located in the U.S.; (ii) the acquirer is a public firm, and the target can be a public or a private firm; iii) the deal value is equal to or greater than \$5 million, (iv) the deal is not classified as spin-offs, recapitalizations, self-tenders, exchange offers, repurchases, acquisitions of remaining interest or a minority stake, and privatizations, and (v) the deal is completed.

---

<sup>3</sup> For example, the overall state-level SC index for Texas is -1.00. However, the overall county-level index for Texas ranges from 1.31 for Briscoe County to -2.44 for Willacy County.

Following the literature, we exclude firms from the utility (Standard Industrial Classification (SIC) codes 4900–4999) and the financial industries (SIC codes 6000–6999). Because the acquirer’s county information is not available in the SDC database, we use zip codes and detailed address information to identify the exact county name and county code of the acquirers. The stock price information is collected from the Center for Research in Security Prices (CRSP) database. We use the Compustat database to identify acquirer characteristics. After merging the sample of M&As with the county-level social capital data from the SCP, we remove all missing values on main variables, resulting in a final sample of 2,832 completed deals between 2010 and 2019. To mitigate the potential influence of outliers, we winsorize all continuous variables at 2.5% and 97.5%. The summary statistics of the variables are presented in Table 1.

## 4. Empirical Results

### 4.1. Social Capital and Acquirer’s Announcement Returns

We estimate the following cross-sectional linear regression to test the empirical relationship between social capital and the acquirer’s announcement returns:

$$CAR(-2, 2)(t) = f(\text{Social capital}, \text{Acquirer attributes}(t-1), \text{Deal attributes}(t), \text{Industry dummies}, \text{and Year dummies}), (1)$$

where the dependent variable,  $CAR(-2, 2)$ , is the acquirer’s cumulative abnormal returns surrounding the announcement date (date 0), from date -2 to 2. *SCAPITAL* is the social capital index of the county where the acquirer is located. We follow the M&A literature and control for acquirer characteristics that determine the acquirer’s announcement

returns, including *LN(AT)*, *LEVERAGE*, *ROA*, *INVESTMENT*, and *Q* (Moeller, Schlingemann, & Stulz, 2004; John, Knyazeva, & Knyazeva, 2015; Lee, Mauer, & Xu, 2018; Li, 2013; Masulis et al., 2007; McConnell & Muscarella, 1985; Schmidt, 2015). We further control for deal characteristics that are known in the literature as the determinants of the acquirer's announcement returns, including *LN(DEALVAL)*, *PUBLIC*, *SAMESTATE*, *STOCKRATIO*, *TENDER*, and *SAMEIND* (Bates & Lemmon, 2003; Ishii & Xuan, 2014; John et al., 2015; Kimbrough & Louis, 2012; Moeller et al., 2004; Masulis et al., 2007). We also control for industry (defined by Fama and French 30 industries) and year fixed effects in all specifications and cluster the standard errors at the industry level. The definitions of variables are provided in Appendix A.

Table 2 reports the estimation results of Equation (1). As shown in Column (1), the coefficient of *SCAPITAL* is positive (0.003) and statistically significant at 5%, consistent with our prediction that social capital positively affects the acquirer's announcement returns. The evidence indicates that a one standard deviation increase in *SCAPITAL* (0.937) is associated with a 28-basis-point increase in the acquirer's announcement returns, which translates into an increase of \$46.79 million, given that the average acquire market capitalization four weeks prior to the announcement date is \$16,712 million.

We further control for the social capital of the county where the target is located, *T\_SCAPITAL*, to account for the possibility that acquirers located in high social capital counties may select a target with a high level of social capital, and the selection may drive the main results. Column (2) shows that our results remain robust to the inclusion of

*T\_SCAPITAL*. Specifically, the coefficient of *T\_SCAPITAL* is small at 0.001 but statistically insignificant, while the coefficient of *SCAPITAL* remains quantitatively similar. This evidence suggests that the social capital environment of the target cannot explain the relationship between the acquirer's county-level social capital and its announcement returns.

In Column (3), we include another measure of social capital, *SCAP\_EX\_EFF*, which excludes collective efficacy, accounting for only three subindexes, family unity, community health, and institutional health. We explain the reason for this analysis in Section 4.2. However, it is noted that the results are quantitatively unchanged in Column (3). *SCAP\_EX\_EFF*, which captures only three dimensions of *SCAPITAL*, is positively associated with the acquirer's announcement returns.

We further show that *LN(DEALVAL)*, *LEVERAGE*, and *ROA* are positively related to the acquirer's announcement returns. The coefficient of *PUBLIC*, the target's public status, is negative (-0.004) and statistically significant at 10%, supporting prior literature on the negative relationship between public target status and the acquirer's announcement returns. Meanwhile, the coefficient of *STOCKRATIO* is negative (-0.020) and statistically significant at 1%, indicating that the acquirers of transactions with more stock payments tend to experience negative announcement returns.

The sign and statistical significance of other control variables are also consistent with the M&A literature. Specifically, the acquirer's asset size reduces the acquirer's announcement returns, while the acquirer's leverage significantly increases the acquirer's



announcement returns. The coefficient of *ROA* equals 0.049 in all three specifications, statistically significant at 10%, implying that high-performing acquirers tend to make value-added acquisitions. The coefficient of *Q* is negative (-0.005) and statistically significant at 1%, indicating that the acquirer's overvaluation is negatively related to the acquirer's announcement returns. Overall, our findings support the *shareholder value maximization view* that acquirers located in a county with a high level of social capital tend to make value-added acquisitions that benefit shareholders.

#### 4.2. Instrumented Regressions

We have thus far shown a positive relationship between social capital and the acquirer's announcement returns, providing support to the *shareholder value maximization view*. Although we control for the various acquirer and deal characteristics and the target's social capital, our findings can be biased because of the presence of omitted confounding factors correlated with social capital and the acquirer's announcement returns. To address this endogeneity concern, we employ an instrumented regression approach.

We first use a group of two instruments for social capital, *RACE\_HFD* and *RELIGION*, as in Alesina and La Ferrara, 2000, Deng et al., 2013, and Gupta et al., 2018. *RACE\_HFD* is the reverse measurement of racial fragmentation of the acquirer's county. It is the Herfindahl index of three general racial categories: Black, White, and other races. Specifically, we use data for the year 1970 provided by the U.S. Census Bureau. We measure *RACE\_HFD* for a given county, *i*, as  $RACE\_HFD = \sum_x s_{xi}^2$ , where *i* represents a

county,  $x$  represents a racial category, and  $s_{xi}$  represents the ratio of the racial population  $x$  in county  $i$  scaled by the population of that county. A higher value of *RACE\_HFD* indicates a lower level of racial fragmentation, which leads to a higher level of social capital.

*RELIGION* is defined as the ratio of the number of religious adherents in the acquirer's county scaled by the total population of that county in 2000. A higher ratio indicates higher religiosity in the county (Deng et al., 2013). To measure *RELIGION*, use the U.S. Religion Census data from the Religious Congregations and Membership Study (2000), provided by the Association of Religion Data Archive (ADRA)<sup>4</sup>. The two instruments satisfy the exclusion restriction as it is unlikely that the variables *RACE\_HFD* measured in 2000 and *RELIGION* measured in 1970 are related to recent M&As.

The second group of two instruments for social capital we use are *BLUESTATE* and *ETHNICITY\_HFD*, as in Deng et al. (2013) and Hasan et al. (2017b). *BLUESTATE* is a dummy variable that equals one if the acquirer is located in a blue state and zero otherwise. We define a state as a blue state when the Democratic party won the greatest percentage of votes in that state. To measure *BLUESTATE*, we use the data for the 2004 U.S. presidential election returns<sup>5</sup>. As blue states have higher levels of social capital, we expect a positive and statistically significant coefficient of *BLUESTATE* in the first stage of the regression.

---

<sup>4</sup> The ARDA provides information on the religiosity of U.S. counties and state every decade.

<sup>5</sup> This data is obtained from the MIT Election Data and Science Lab. <https://electionlab.mit.edu/data>.

*ETHNICITY\_HFD* is the ethnic homogeneity of the acquirer's county, measured by a Herfindahl index generated across four basic ethnic categories: Hispanic, non-Hispanic white, non-Hispanic black, and Asian. We calculate *ETHNICITY\_HFD* using the following equation:  $ETHNICITY\_HFD = \sum_y s_{yi}^2$ , where  $i$  represents a county,  $y$  represents an ethnic category, and  $s_{yi}$  represents the ratio of the population of ethnic group  $y$  in county  $i$  scaled by the population in that county. We use intercensal estimates data for the year 2000 provided by the U.S. Census Bureau. A higher value of *ETHNICITY\_HFD* will represent a higher level of ethnic homogeneity, i.e., less diversity in ethnic groups. Putnam (2007) argues that "people living in ethnically diverse settings appear to 'hunker down' – that is, to pull in like a turtle.", suggesting that ethnic homogeneity leads to an increase in social capital. It is unlikely that election returns and ethnic homogeneity are associated to recent M&A transactions.

Our third group of instruments for social capital include *RACE\_HFD*, *RELIGION*, and *BLUESTATE*.

The results of instrumented regressions are reported in Table 3. The first-stage regression results in Column (1) suggest that racial fragmentation (and religiosity) negatively (positively) affects social capital as the coefficients of *RACE\_HFD* and *RELIGION* are both positive at 5.481 and 0.743, respectively, being statistically significant at 1%. The two coefficients are also jointly significant with a large  $F$ -statistics. From Column (1), we generate the predicted value of social capital, *SCAP\_HAT1*, and use it as our main independent variable in the second-stage regression. The coefficient of

*SCAP\_HAT1* in Column (2), is positive (0.003) and statistically significant at 5%, implying that our findings remain robust against endogeneity concerns.

Similarly, in Column (3), the coefficients of *ETHNICITY\_HFD* and *BLUESTATE* are both positive and statistically significant at 1% in the first-stage regression, suggesting that ethnic homogeneity has a positive relationship with social capital, and counties located in Democratic states tend to have higher levels of social capital relative to those in Republican states. The two coefficients are jointly significant with an *F*-statistics of 158.96. The second-stage regression results in Column (4) suggest the main results are robust. Specifically, the coefficient of *SCAP\_HAT2* is positive (0.003) and statistically significant at 5%.

Columns (5) and (6) report the first-stage and second-stage regression results respectively when we use *RACE\_HFD*, *RELIGION*, and *BLUESTATE* as instruments for social capital. The coefficients of the instruments are positive and the *F*-statistics for the three instruments are large at 797.75, suggesting that the instruments meet the relevance condition. In Column (6), we document a positive and statistically significant effect of *SCAP\_HAT3* on the acquirer's announcement returns. Overall, the results of instrumented regressions suggest our baseline regression results are robust against endogeneity concerns.

#### *4.3. Dimensions of Social Capital and Acquirer's Announcement Returns*

According to the details of the SCP described in Section 3.1, the social capital index measured at the county level is comprised of four components—family unity

(*FAM\_UNITY*), community health (*COM\_HEALTH*), institutional health (*INS\_HEALTH*), and collective efficacy (*COL\_EFF*). In this section, we decompose and analyze the relationship between each of the dimension-level indicators with the acquirer's announcement returns. The results are presented in Table 4.

We find a positive effect of all four components of social capital on the acquirer's announcement returns as shown in Columns (1) to (4) with *t*-statistics between 0.95 and 2.30. The coefficient of *COL\_EFF* in Column (4) equals 0.002 with the highest *t*-statistics of 2.30. Therefore, it is concerned that collective efficacy may drive the effect of social capital on the acquirer's announcement returns. This explains the reason for adding Column (3) to Table 2, which eliminates such concern. Overall, the results suggest that all four dimensions of social capital positively increase the acquirer's announcement returns.

#### *4.4. Cross-sectional Analyses*

We further investigate the role of social capital as a societal monitoring mechanism which leads to higher acquirer's announcement returns. We first examine the conditional effect of social capital on the supermajority required to approve a merger. Gompers et al. (2003) state that the supermajority required to approve a merger act as a form of antitakeover amendments which increases the difficulty of taking over and replacing the management. It limits the extent to which shareholders can affect the decisions of the management (Bebchuk, Cohen, and Ferrell, 2009). Thus, supermajority requirements can exacerbate the agency problem in the acquiring firm which will result in a more pronounced effect of social capital.

We find supporting results for this, evidenced by the interaction term between social capital (*SCAPITAL*) and the supermajority required for merger decision (*SUPERMAJORITY*),  $SCAPITAL \times SUPERMAJORITY$ , which is positive (0.006) and statistically significant at 5% as shown in Column (1) of Table 5.

In addition, we examine the effect of social capital conditional on the acquirer's blockholder ownership. Shleifer and Vishny (1986) state that blockholders as large shareholders can monitor the managers. They are willing (large cash flow rights) and able (large voting power) to involve in the firm's internal decision process, mitigating agency problems and improving firm valuation (Boubaker, Cellier, & Rouatbi, 2014; Laeven & Levine, 2008; Maury & Pajuste, 2005).<sup>6</sup> Therefore, we expect the effect of social capital to be less pronounced when the acquirer's blockholder ownership is larger. We define *BLOCKHOLDERS* as the percentage of stocks held by owners with five percent or more ownership in the acquirer. The regression results in Column (2) of Table 5 are consistent results with our prediction. Specifically, the coefficient of  $BLOCKHOLDERS \times SCAPITAL$  is negative (-0.024) and statistically significant at 5%.

Prior literature shows that large firms tend to have more severe agency problems. Humphery-Jenner and Powell (2014) suggest that larger firms have higher managerial entrenchment costs. Offenbergh (2009) and Harford, Humphery-Jenner, and Powell (2012) provide evidence that larger firm size can insulate managers from external discipline by

---

<sup>6</sup> Literature documents the monitoring effort exerted by blockholders both directly (Attig, El Ghouli, & Guedhami, 2009; Cheng, Lin, Lu, & Wei, 2020; Maury & Pajuste, 2005) and indirectly (Attig et al., 2008; Ben-Nasr, Boubaker, & Rouatbi, 2015; Boubaker, Rouatbi, & Saffar, 2017).

the takeover market, causing managerial entrenchment and value-destruction. Moeller et al. (2004) show that larger acquirers make worse acquisitions and earn lower announcement returns. We, therefore, predict that social capital will have a larger impact on the acquirer's announcement returns when the acquirer's size is larger. We use  $LN(AT)$ , the natural logarithm of the acquirer's total assets, to proxy for the acquirer's size. We find consistent results in Column (3) of Table 5 that the coefficient of  $LN(AT) \times SCAPITAL$ , which is positive (0.001) and statistically significant at 10%.

Literature also suggests that larger deal value is often associated with severe agency problems in the acquiring firm. Overconfident managers tend to bid for larger targets as they overestimate their ability to extract acquisition benefits (Hayward & Hambrick, 1997; Malmendier & Tate, 2008; Roll, 1986). Additionally, these managers may pay excessively for larger targets because of higher private benefits (Grinstein & Hribar, 2004; Harford & Li, 2007; Loderer & Martin, 1990; Morck, Shleifer, & Vishny, 1990). We, therefore, hypothesize that for transactions with a larger deal value, social capital will have a larger impact on the acquirer's announcement returns. Consistent with this hypothesis, we find that the coefficient of the interaction term between deal size,  $LN(DEALVAL)$ , and  $SCAPITAL$ ,  $LN(DEALVAL) \times SCAPITAL$  is positive (0.002) and statistically significant, as shown in Column (4) of Table 5.

Prior literature documents that stock-financed acquisitions are often associated with stock overvaluation in the acquiring firm. Fu, Lin, and Officer (2013) and Harford & Li (2007) add that overvalued acquirers often overpay their target when using stock as

the method of payment, and it is motivated by the managers' self-serving behavior. Hence, we predict that social capital will have a greater impact on the acquirer's announcement returns in stock-financed transactions. We find supporting results for this prediction, evidenced by the interaction term between *SCAPITAL* and the ratio of stock payment, *STOCKRATIO*,  $STOCKRATIO \times SCAPITAL$ , which is positive (0.016) and statistically significant at 5%, as documented in Column (5) of Table 5.

## 5. Additional Analyses

### 5.1. Social Capital and Synergies

The *shareholder value maximization view* suggests that the managers of acquirers located in high social capital regions are less likely to have opportunistic and self-serving behaviors. It is expected that these managers will exert effort and help acquirers to identify targets that deliver better economic gains through due diligence on the targets and target assessment. To shed light on this view, we regress the transaction synergies on the acquirer's social capital as follows:

$$SCAR(-2, 2)(t) = f(\text{Social capital}, \text{Acquirer attributes}(t-1), \text{Deal attributes}(t), \text{Industry dummies}, \text{and Year dummies}) \quad (1)$$

Our full sample includes 2832 transactions by public acquirers, of which 2050 targets are private, and the remaining 782 targets are public. We identify 403 transactions where we can obtain the announcement returns of both the public target and the acquirer. Following Moeller et al., (2004), Offenberger, Straska, & Waller (2014), and Wang & Xie (2009), we measure transaction synergies, *SCAR*(-2, 2), as the value-weighted portfolio of



cumulative abnormal returns of both the target and the acquirer from date -2 to 2,  $CAR(-2, 2)$ , surrounding the announcement date (date 0). We use the market-adjusted model to measure the announcement returns. The portfolio weights are the target's and the acquirer's market capitalization four weeks before the announcement date scaled by the sum of their market capitalization. The regression results of transaction synergies are presented in Table 6.

Column (1) shows that the coefficient of *SCAPITAL* is positive (0.006) and statistically significant at 1%, implying that the acquirer's social capital positively affects transaction synergies. Specifically, one standard deviation increase in *SCAPITAL* (0.937) leads to an increase of 56 basis points in the value-weighted announcement returns. In Column (2), we control for both acquirer and transaction characteristics. The coefficient of *SCAPITAL* increases slightly to 0.008, but it is statistically significant at 5%. Overall, the findings suggest that the findings in Table 6 are consistent with the *shareholder value maximization view* that the acquirer located in a higher social capital county acquires the target that generate greater transaction synergies.

## 5.2. Social Capital and the Acquirer's Long-term Operating Performance

In this section, we investigate the impact of social capital on the acquirer's long-term operating performance. According to the *shareholder value maximization view*, high social capital prevents the acquirer's managers from engaging in opportunistic and self-serving behaviors, leading to a positive post-acquisition operating performance in the long term. Following Huang, Jiang, Lie, & Yang (2014), we measure the changes in

operating performance,  $\Delta AROA(-1, t)$ , as the difference between the industry-adjusted operating performance right before the announcement date (time -1) and  $t$  years after the announcement date ( $t$ ).  $\Delta AROA(-1, t)$  reflects a  $t$ -year horizon change in the acquirer's operating performance. The industry-adjusted operating performance,  $AROA$ , is defined as the difference between the acquirer's operating performance and the median operating performance of matched Compustat-listed firms that are in the same 2-digit SIC code with the acquirer and have the total asset size between +50% and +150% the acquirer's total asset size. Specifically, our main dependent variable,  $\Delta AROA(-1, t)$ , equals  $AROA(t)$  minus  $AROA(-1)$ , where  $t$  changes from 2 to 5.

Table 7 provides the regression results of the changes in industry-adjusted operating performance on the acquirer's social capital index,  $SCAPITAL$ . The regression of  $\Delta AROA(-1, 2)$  in Column (1) shows that the coefficient of  $SCAPITAL$  is positive at 0.002, but it is statistically insignificant with a  $t$ -statistics of 0.88. However, when the periods used to measure the long-term performance are longer ( $t$  is between +3 and +5), the coefficient of  $SCAPITAL$  is more economically and statistically significant. Specifically, in Column (2) where  $\Delta AROA(-1, 3)$  is the main independent variable, the coefficient of  $SCAPITAL$  equals 0.005 and it is statistically significant at 5%. This coefficient suggests that with one standard deviation increase in  $SCAPITAL$ , the long-term operating performance increases by 0.0047, ceteris paribus. Relative to the average of  $AROA(-1)$  of 0.018, the increase translates into a +26.11% change in the industry-adjusted operating performance. In Column (3), the coefficient of  $SCAPITAL$  is quantitatively unchanged; however, it is slightly smaller in Column (4) at 0.004 and is statistically significant at 10%.

Overall, this evidence suggests that social capital increases the acquirer's long-term operating performance.

### *5.3. Social Capital and Acquirer's Long-term Stock Returns*

In this section, we examine the effect of social capital on the acquirer's long-term stock returns. We employ a calendar-time portfolio regression method to calculate the long-term stock returns of acquirers. Specifically, we construct an equally weighted portfolio of acquirers that completed their transactions for each calendar month between 2010 to 2019 as in Moeller et al. (2004). The portfolio is rebalanced every month by removing the acquirers that stay in the portfolio for 36 months and including the acquirers that have just completed an acquisition. Finally, we regress the portfolio's monthly excess returns on the 3 factors, 5 factors, 6 factors, and 7 factors (Carhart, 1997; Fama & French 1992, 1993).

Panel A of Table 8 reports the long-term abnormal returns of the equally weighted portfolio of all acquirers ( $\alpha$ ). As shown,  $\alpha$  is negative in all columns, and it is statistically significant at 5% and 1% in Columns (1) and (2), respectively. The results suggest that acquirers experience negative long-term abnormal returns on average, consistent with the findings in the existing literature (Agrawal, Jaffe, & Mandelker, 1992). However,  $\alpha$  is not statistically significant at conventional levels in Columns (3) and (4).

Panel B of Table 8 reports the long-term abnormal returns for the subgroup of acquirers in low social capital counties. As shown, the value of  $\alpha$  is negative and statistically significant in all models, suggesting that acquirers in low social capital

counties experience negative long-term abnormal returns. The monthly abnormal returns of -0.003 in Columns (1) and (2) are equivalent to an annualized abnormal return of -3.67%, while the monthly abnormal returns of -0.002 in Columns (3) and (4) suggests an annualized abnormal returns of -2.43%. Overall, the evidence suggests that acquisitions by firms located in low social capital counties are value-destroying in the long term.

In Panel C of Table 8, we report  $\alpha$  values for the subsample of acquirers in high social capital counties. As shown,  $\alpha$  equals -0.001, -0.000, 0.000, and 0.000 for the usage of 3, 5, 6, and 7 factors, respectively. The  $\alpha$  values are statistically insignificant in all columns, implying that the acquisitions completed by the acquirers in high social capital counties are not value-destroying as those in low social capital counties.

In Panel D, we form a long-short strategy and generate its long-term abnormal returns. Specifically, we form portfolios for each subsample of acquirers and calculate the time series of the differences of the portfolios' excess returns. We then generate  $\alpha$  values for the strategy, i.e., holding the long position for the high social capital portfolio and the short position for the low social capital portfolio. We document positive values of  $\alpha$  (0.002) in all specifications, which is equivalent to annualized abnormal returns of +2.43%. Overall, the evidence suggests a positive relation between social capital and acquirer's long-term operating performance and long-term stock returns.

#### *5.4. Social Capital and Deal Duration*

According to the *shareholder maximization view*, social capital prevents the acquirer's managers from engaging in opportunistic and self-serving behaviors that are

against the interests of shareholders. As a result, the managers of the acquirer in high social capital counties tend to exert more efforts to proceed with the deal, and it is expected that the deal duration is shorter when the social capital of the county where the acquirer is located is high.

To test this hypothesis, we measure,  $LN(1+DURATION)$ , the natural logarithm of one plus the number of days between the announcement date and the effective date as in (Song, Wei, & Zhou, 2013). Then, we regress the duration measurement on the acquirer's social capital, *SCAPITAL*. The regression results are reported in Table 9. As shown in Column (1) of Table 9, the coefficient of *SCAPITAL* is negative (-0.076) and statistically significant at 5%, suggesting that social capital reduces deal duration. Specifically, one standard deviation increase in *SCAPITAL* is associated with a 7.12% decrease in the deal duration.

In Column (2), we analyze the effect of social capital on deal duration using the subsample of deals financed entirely with cash. The coefficient of *SCAPITAL* remains negative at -0.006 but it becomes statistically insignificant. However, the effect of social capital is more pronounced in Column (3) as financing methods other than cash are used. The coefficient of *SCAPITAL* of -0.106 indicates that one standard deviation increase in *SCAPITAL* leads to a 9.37% decrease in deal duration. Overall, the findings suggest that social capital helps to reduce deal duration as the managers exert more effort to process the transaction. This effect is more significant when the transaction is not fully financed with cash which requires greater managerial efforts.

## 6. Robustness Tests

In this section, we conduct several analyses to confirm the robustness of our findings.

### 6.1. *Social Capital, Corporate Social Responsibility, and Acquirer's Announcement Returns*

Deng et al. (2013) document supporting evidence for the *stakeholder value maximization view* that firm-level corporate social responsibility (CSR) activities positively affect the shareholders' wealth as high-CSR firms tend to have a strong reputation for keeping implicit contracts, thus stakeholders have strong incentives to contribute efforts to the firms. Though CSR activities do not encompass all dimensions of social capital (Lins et al., 2017), it is concerned that it is a partial representation of social capital, which can drive our main findings.

To address such concerns, we re-estimate Equation (2) with additional control variables measuring the acquirer's CSR activities. We utilize the KLD CSR dataset that provides qualitative ratings (1 or 0) to affirmative questions for the strengths and concerns of CSR in different dimensions. We sum up strengths and concerns by firm and year across six dimensions: the diversity in the firm, the corporate community, the relationship between employees, the respect for human rights, the working environment, and the product produced. *CSR* is the total of the net CSR score for each dimension generated by subtracting the sum of concerns from that of strengths and has a range of -

4 to 9. We then match the values of CSR to the acquirer by firm and year.<sup>7</sup> We also use other alternative measurements of CSR as control variables, including: (i) *CSR\_D*, a dummy variable that equals one if a firm has a positive value of CSR; (ii) *CSR\_STR*, the sum of the firm's CSR strengths across six dimensions; and (iii) *CSR\_CON*, the sum of the firm's CSR concerns across six dimensions.

In Column (1) of Table 10, we control for CSR. The results remain robust, evidenced by the positive coefficient of *SCAPITAL*. The results are also robust to the inclusion of alternative CSR indicators, *CSR\_D*, *CSR\_STR*, and *CSR\_CON* in Columns (2), (3), and (4) of Table 10, respectively. We also find positive effects of CSR indicators in Columns (1), (2), and (3) with the *t*-statistics varying from 0.89 to 1.54. Interestingly, the coefficient for *CSR\_CON* in Column (4) is non-negative at 0.001, but statistically insignificant. These positive effects of CSR measurement are marginally consistent with the *stakeholder value maximization view*. Nonetheless, the evidence on the positive impact of social capital suggests that the SCP SC index at the county level captures dimensions beyond CSR, supporting the *shareholder value maximization view*.

## 6.2. Alternative Measurements of the Acquirer's Announcement Returns

We also examine the robustness of our findings to alternative measurements of the acquirer's announcement returns. First, using the same market-adjusted model, we set different windows for the acquirer's cumulative abnormal returns. Specifically, we carry

---

<sup>7</sup> In the case of missing data, we backfill with the latest data available before the year with missing data. When this is also not available, we fill the data with the industry median value, generated using the Fama and French 30 industries, by industry and year.

out regression using  $CAR(-1, 1)$  and  $CAR(-5, 5)$  as the dependent variable, which represents the acquirer's announcement returns surrounding the announcement date (date 0) from date -1 to 1 and date -5 to 5 respectively. The results are shown in columns (1) and (2) of Table 11 and suggest that our findings are robust to alternative window periods for the acquirer's cumulative abnormal returns.

Second, we use alternative risk-adjusted models to calculate the acquirer's cumulative abnormal returns. Specifically, we employ the Fama and French three-factor model and the Fama and French three-factor model with momentum. The regression results are reported in Columns (3) and (4) of Table 11. The positive and statistically significant coefficients of *SCAPITAL* suggest that our findings are robust to alternative measurements of the acquirer's announcement returns when we use alternative risk-adjusted models.

### *6.3. Alternative Measurements of the Social Capital Index*

To further examine whether social capital indeed positively affects the acquirer's announcement returns, we test the robustness of our results to alternative measurements of social capital. First, we follow the Putnam (2000) index and create an alternative social capital index using equal weights for the four components of the SCP SC index, *EW\_SCAPITAL*. The positive coefficient (0.004) of *EW\_SCAPITAL* in Column (1) of Table 12 is statistically significant at 5%, consistent with the results documented in Table 2 where the social capital index is generated using the PCA method.



We also construct dummy variables, *SC\_POSITIVE* and *SC\_HIGH*, which are equal to one if the social capital of the acquirer's county is positive and if the social capital of the acquirer's county is equal to or greater than the median of the M&A sample and zero otherwise, respectively. The regression results of *CAR*(-2, 2) on *SC\_POSITIVE* and *SC\_HIGH* are shown in Columns (2) and (3) of Table 12. The positive coefficients (0.004) of *SC\_POSITIVE* and *SC\_HIGH* are evidence of the robustness of our results to alternative measurements of social capital.

#### 6.4. Pseudo Analyses

In this section, we carry out pseudo-analyses to further confirm the robustness of our main results. First, we select a pseudo value of *SCAPITAL* randomly from all the values of *SCAPITAL* in our final sample for each M&A transaction. Second, we obtain a pseudo-announcement date randomly from the sample of dates that satisfies two conditions: (i) The dates differ from the actual M&A announcement date; and (ii) The dates belong to the same year as the actual M&A announcement date. Third, we randomly choose a pseudo-acquirer from a pool of non-acquirer firms listed in CRSP and Compustat in the same year. Fourth, we randomize both the transaction announcement date and the acquirer. Then, we re-run our baseline regression to obtain the coefficient of *SCAPITAL*, repeating this process 1,000 times. The results are reported in Columns (1) to (4) of Table 13. We also provide the distribution of the bootstrapped coefficient of *SCAPITAL* for the four simulations in Appendix C. The coefficient for *SCAPITAL*, which is 0.003 as in our baseline model is located on the far right of the distribution (between

2.19 and 3.75 standard deviations from the mean of the bootstrapped coefficients) in all four simulations. These results indicate the low probability that our baseline results for the coefficient of *SCAPITAL* are generated by coincidence.

Overall, additional analyses further support the evidence on the positive relationship between social capital and the acquirer's announcement returns, and this relationship is robust to the inclusion of firm-level CSR activity, alternative measurements of acquirer's announcement returns and social capital index, and pseudo analyses.

## **7. Conclusion**

This paper examines the effect of social capital, characterized by dense social networks, close social relationships, and cooperative social norms, on the outcomes of M&As. The *shareholder value maximization view* suggests that social capital functions as deterrence for opportunistic and self-serving managerial behaviors which improve the outcomes of M&As. Using a large sample of 2832 M&A transactions during the period 2010-2019 and the county-level social capital index from the Social Capital Project, we provide supportive evidence that acquirers located in counties with higher social capital experience higher announcement returns. This finding remains robust to alternative model specifications, endogeneity concerns, the control of the acquirer's CSR activities, and alternative measurements of announcement returns and social capital.

Cross-section analyses show that the effect of social capital on the acquirer's announcement returns is more pronounced when agency problems in the acquirer are

more severe, i.e., when the percentage of blockholder ownership is low, or when the supermajority required to approve a merger, the acquirer size, the deal size, or the ratio of stock payment is high. Additional analyses suggest that social capital also creates higher transaction synergies, enhances the acquirer's long-term operating performance, and increases the acquirer's long-term stock returns, consistent with the *shareholder value maximization view*. The evidence also shows the benefits of social capital in decreasing the deal duration.

Overall, these results suggest that the shareholders of acquirers located in high social capital regions benefit from the close social relationships, high social connectedness, and solid cooperative norms at the county level, evidenced by higher announcement returns and better long-term performance, and a shorter deal duration.

## Appendix

### A: Definition of Variables

Variable	Description	Data Sources
<b>Main variables</b>		
<i>SCAPITAL</i>	The social capital index of the county where the acquirer is located. The index accounts for four dimensions of social capital, including family unity, community health, institutional health, and collective efficacy, weighted using the Principal Components Analysis (PCA) method.	The Social Capital Project (SCP)
<i>CAR(-2, 2)</i>	The cumulative abnormal returns of the acquirer surrounding the announcement date (date 0) generated over the event window of five days, from date -2 to 2. The market-adjusted model is used to generate abnormal returns with CRSP value-weighted returns served as the market benchmark.	CRSP
<b>Deal characteristics</b>		
<i>LN(DEALVAL)</i>	The natural logarithm of the deal value (\$ million).	SDC M&A
<i>SAMESTATE</i>	A dummy variable that equals one if the target and the acquirer are located in the same state and zero otherwise.	SDC M&A
<i>PUBLIC</i>	A dummy variable that equals one if the target is a public firm and zero otherwise.	SDC M&A
<i>STOCKRATIO</i>	The ratio of stock used as the method of payment.	SDC M&A
<i>TENDER</i>	A dummy variable that equals one if the transaction is identified as a tender offer and zero otherwise.	SDC M&A
<i>SAMEIND</i>	A dummy variable that equals one if the target and the acquirer operate in the same industry (defined by the first two digits of the SIC codes) and zero otherwise.	SDC M&A
<b>Acquirer characteristics</b>		
<i>LN(AT)</i>	The natural logarithm of the acquirer's total assets.	Compustat
<i>LEVERAGE</i>	The acquirer's total debts scaled by its total assets.	Compustat
<i>ROA</i>	The acquirer's earnings before interest and taxes scaled by its total assets.	Compustat
<i>INVESTMENT</i>	The acquirer's total expenditures scaled by its total assets.	Compustat
<i>Q</i>	The market value of assets scaled by the book value of assets, where the market value of assets is measured as the sum of the book value of debts and market capitalization.	Compustat
<b>Other variables</b>		
<i>SCAP_EX_EFF</i>	The county-level social capital index generated using three dimensions instead of four in <i>SCAPITAL</i> , i.e., excluding collective efficacy. Measured using the PCA method to generate weights for family unity, community health, and institutional health.	The Social Capital Project (SCP)

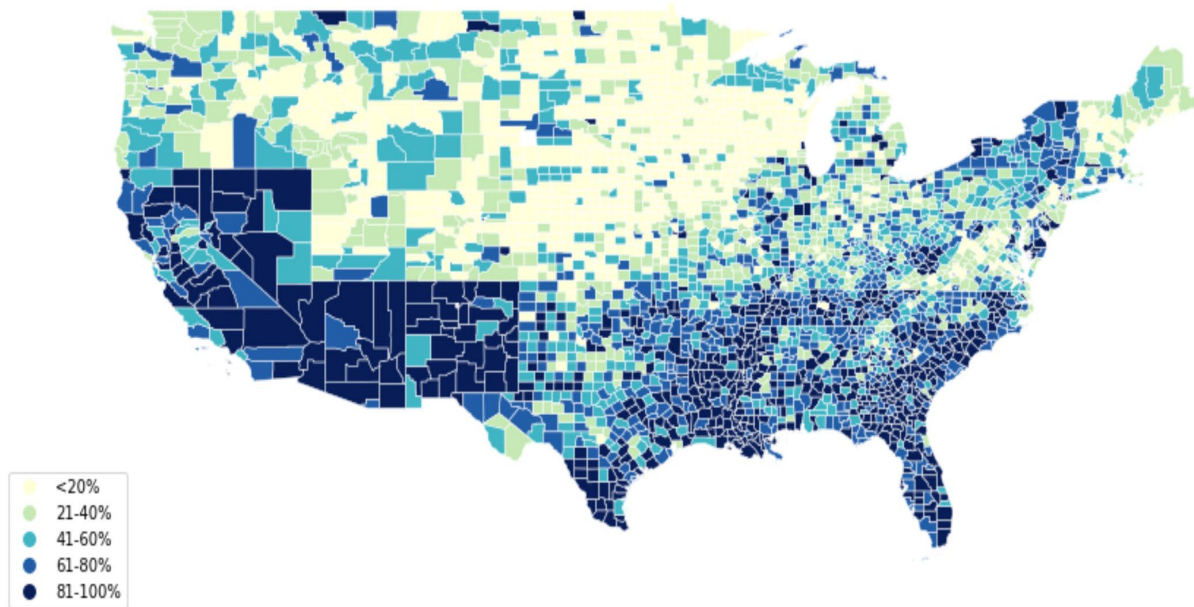
<i>T_SCAPITAL</i>	The social capital index of the county where the target is located. The index accounts for four dimensions of social capital, including family unity, community health, institutional health, and collective efficacy.	The Social Capital Project (SCP)
<i>COL_EFF</i>	The county-level collective efficacy (violent crime rate), a standalone indicator measured by the number of violent crimes per 100,000.	The Social Capital Project (SCP)
<i>FAM_UNITY</i>	The county-level family unity sub-index measured using the PCA method to generate weights for the following indicators: the share of births that are to unwed mothers (weight=0.52), the share of children living in families headed by a single parent (weight=0.62), and the share of women ages 35-44 who are married (and not separated) (weight=0.59).	The Social Capital Project (SCP)
<i>COM_HEALTH</i>	The county-level community health subindex measured using the PCA method to generate weights for the following indicators: the registered non-religious non-profits per 1000 (weight=0.70), the religious congregations per 1000 (weight=0.48), and the informal civil society subindex (weight=0.53). State-level data were used to generate the informal civil society subindex due to the lack of county-level data.	The Social Capital Project (SCP)
<i>INS_HEALTH</i>	The county-level institutional health sub-index measured using the PCA method to generate weights for the following indicators: presidential voting rates (weight=0.63), census mail-back response rates (weight=0.41), and the institution confidence subindex (weight=0.66). State-level data were used to generate the institution confidence subindex due to the lack of county-level data.	The Social Capital Project (SCP)
$\Delta ROA(-1, t)$	Change in the acquirer's adjusted ROA from the fiscal year right before the announcement date (fyr -1) to $t$ fiscal years after the announcement date (fyr + $t$ ). We measure $\Delta ROA(-1, t)$ for $t$ values between +2 and +5.	Compustat
$LN(1+DURATION)$	The natural logarithm of one plus deal duration. Deal duration is the number of days between the effective date and the announcement date.	SDC M&A
<i>SYNERGY</i>	The value-weighted portfolio of cumulative abnormal returns of the target and the acquirer surrounding the announcement date (date 0), from date -2 to 2. The weights are measured as the target's and the acquirer's market capitalization four weeks before the announcement date, scaled by the sum of their market capitalization.	CRSP
<i>CSR</i>	The firm-level CSR performance that equals the sum of the net CSR scores for six qualitative dimensions of CSR including the diversity in the firm, the corporate community, the relationship between employees, the respect for human rights, the working environment, and the product produced. Net	KLD CSR

CSR scores are calculated by subtracting the sum of concerns from that of strengths.

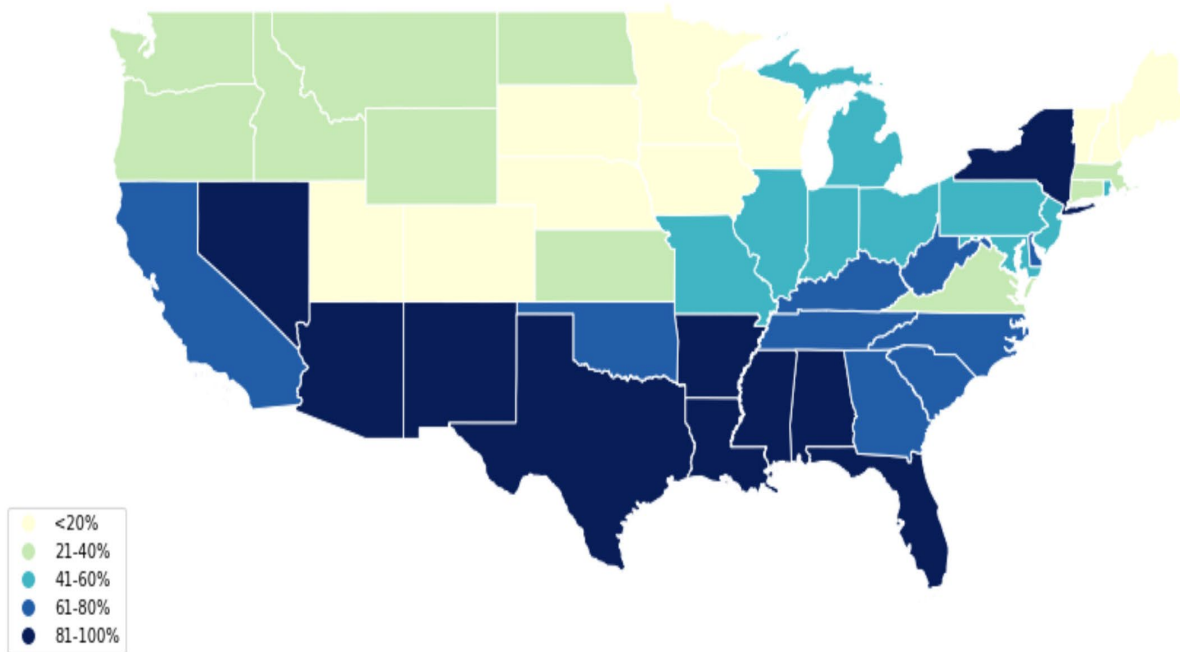
<i>CSR_D</i>	A dummy variable that equals one if a firm is socially responsible, i.e., has a positive value for CSR as defined above.	KLD CSR
<i>CSR_STR</i>	The sum of the firm's CSR strengths across six dimensions as defined above.	KLD CSR
<i>CSR_CON</i>	The sum of the firm's CSR concerns across six dimensions as defined above.	KLD CSR
<i>EW_SCAPITAL</i>	The county-level social capital index generated using equal weights for the four components of social capital, i.e., <i>FAM_UNITY</i> , <i>COM_HEALTH</i> , <i>INS_HEALTH</i> , and <i>COL_EFF</i> .	The Social Capital Project (SCP)
<i>SC_POSITIVE</i>	A dummy variable that equals one if the social capital of the acquirer's county is positive and zero otherwise.	The Social Capital Project (SCP)
<i>SC_HIGH</i>	A dummy variable that equals one if the social capital of the acquirer's county is equal to or greater than the median of the M&A sample and zero otherwise.	The Social Capital Project (SCP)
<i>SUPERMAJORITY</i>	The supermajority required to approve a merger, i.e., the voting percentage required to approve a merger decision.	ISS
<i>BLOCKHOLDERS</i>	The blockholder percentage in the acquirer, i.e., the percentage of owners with five percent or more share ownership in the company.	MSCI
<b><i>Instrument variables</i></b>		
<i>RACE_HFD</i>	The reverse measure of the racial fragmentation of the acquirer's county, measured by a Herfindahl index calculated across three general racial categories: Black, White, and other races. Census data for the year 1970 is used.	U.S. Census Bureau
<i>RELIGION</i>	The religiosity of the acquirer's county, measured by the number of religious adherents scaled by the total population in that county for the year 2000. A higher ratio indicates higher religiosity.	U.S. Religion Census
<i>BLUESTATE</i>	A dummy variable that equals one if the acquirer is located in a blue state and zero otherwise. A blue state is a state where the Democratic party has the greatest percentage of votes. The data is from the 2004 U.S. presidential elections.	MIT Election Data and Science Lab
<i>ETHNICITY_HFD</i>	The ethnic homogeneity of the acquirer's county, measured by a Herfindahl index calculated across four basic ethnic categories: Hispanic, non-Hispanic white, non-Hispanic black, and Asian. Intercensal estimates for the year 2000 are used.	U.S. Census Bureau

**B: Social Capital of the United States**

**Figure B1:** The county-level Social Capital Index



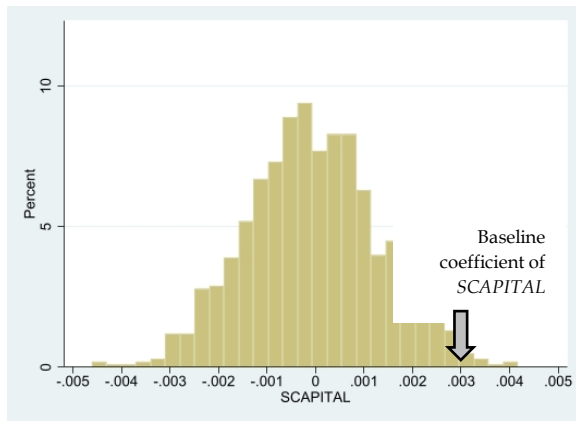
**Figure B2:** The State-level Social Capital Index



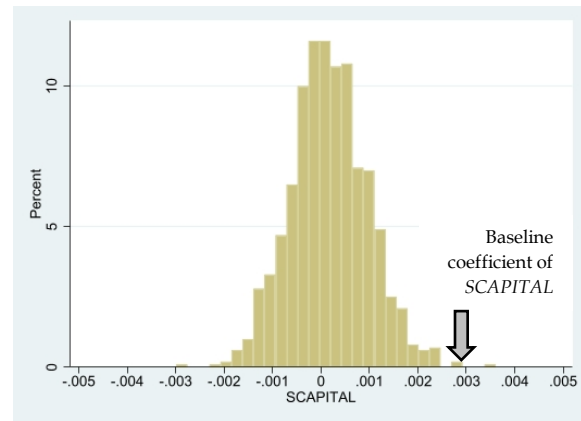
## C: Bootstrapped Coefficients

The figure shows the histograms of the frequency distribution of bootstrapped coefficients of *SCAPITAL*. In panel A, for each M&A deal, we randomly select a value of *SCAPITAL* from the pool of all possible values of *SCAPITAL* in our final sample. In panel B, for each M&A deal, we randomly choose a pseudo announcement, which satisfies the two following conditions: (i) being a non-M&A announcement date, and (ii) being a trading day in the same announcement year. In panel C, on each actual announcement date, we randomly select a pseudo acquirer from the pool of all acquirers. In panel D, we simultaneously randomize the announcement date and the acquirer. We then re-run the baseline regression to obtain the coefficient  $\beta$  on *SCAPITAL*. We repeat this process 1,000 times to obtain 1,000 bootstrapped coefficients of *SCAPITAL*.

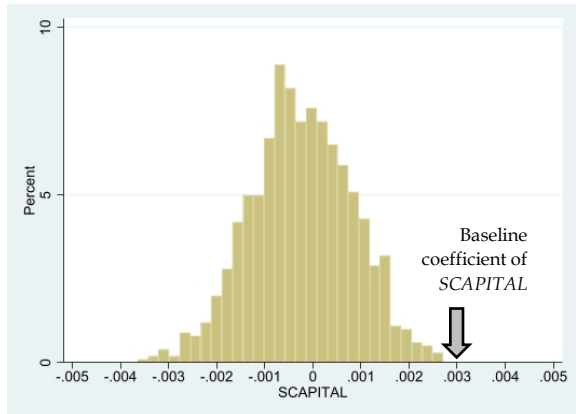
Panel A.



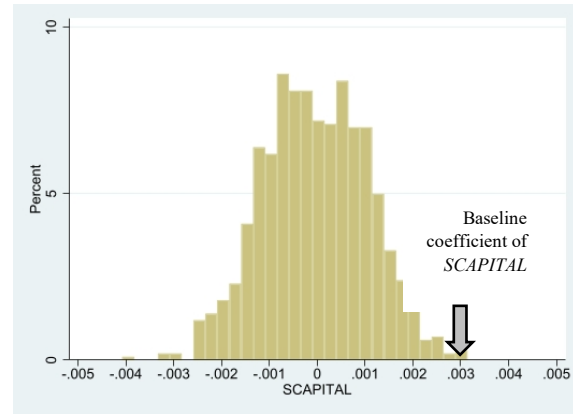
Panel B.



Panel C.



Panel D.





## References

- Agrawal, A., Jaffe, J. F., & Mandelker, G. N. (1992). The post-merger performance of acquiring firms: a re-examination of an anomaly. *Journal of Finance*, 47(4), 1605–1621.
- Alesina, A., & La Ferrara, E. (2000). Participation in heterogeneous communities. *Quarterly Journal of Economics*, 115(3), 847–904.
- Attig, N., El Ghouli, S., & Guedhami, O. (2009). Do multiple large shareholders play a corporate Governance role? Evidence from East Asia. *Journal of Financial Research*, 32(4), 395–422.
- Bates, T. W., & Lemmon, M. L. (2003) Breaking up is hard to do? An analysis of termination fee provisions and merger outcomes. *Journal of Financial Economics*, 69(3), 469–504.
- Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance? *Review of Financial Studies*, 22(2), 783–827.
- Ben-Nasr, H., Boubaker, S., & Rouatbi, W. (2015). Ownership structure, control contestability, and corporate debt maturity. *Journal of Corporate Finance*, 35, 265–285.
- Boubaker, S., Cellier, A., & Rouatbi, W. (2014). The sources of shareholder wealth gains from going private transactions: The role of controlling shareholders. *Journal of Banking and Finance*, 43(6), 226–246.
- Boubaker, S., Rouatbi, W., & Saffar, W. (2017). The role of multiple large shareholders in the choice of debt source. *Financial Management*, 46(1), 241–274.
- Cheng, M., Lin, B., Lu, R., & Wei, M. (2020). Non-controlling large shareholders in emerging markets: Evidence from China. *Journal of Corporate Finance*, 63, 101259.
- Carhart, M. M. (1997). On persistence in mutual fund performance. *Journal of Finance*, 52(1), 57–82.
- Chi, J. D., & Lee, D. S. (2010). The conditional nature of the value of corporate governance. *Journal of Banking & Finance*, 34(2), 350–361.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95–S120.
- Deng, X., Kang, J.-k., & Low, B. S. (2013). Corporate social responsibility and stakeholder value maximization: Evidence from mergers. *Journal of Financial Economics*, 110(1), 87–109.
- Duchin, R., & Schmidt, B. (2013). Riding the merger wave: Uncertainty, reduced monitoring, and bad acquisitions. *Journal of Financial Economics*, 107(1), 69–88.
- Elster, J. (1989). Social norms and economic theory. *Journal of Economic Perspectives*, 3(4), 99–117.

- Fama, E. F., & French, K. R. (1992). The cross-section of expected stock returns. *Journal of Finance*, 47, 427-465.
- Fama, E. F., and French, K. R. (1993). Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics*, 33, 3-56.
- Fama, E., French, K. (2015). A five-factor asset pricing model. *Journal of Financial Economics*, 116(1), 1-22.
- Fich, E. M., & Shivdasani, A. (2007). Financial fraud, director reputation, and shareholder wealth. *Journal of Financial Economics*, 86(2), 306-336.
- Fu, F., Lin, L., & Officer, M. S. (2013). Acquisitions driven by stock overvaluation: Are they good deals? *Journal of Financial Economics*, 109(1), 24-39.
- Giroud, X., & Mueller, H. M. (2010). Does corporate governance matter in competitive industries? *Journal of Financial Economics*, 95(3), 312-331.
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, 118(1), 107-156.
- Grinstein, Y., & Hribar, P. (2004). CEO compensation and incentives: Evidence from M&A bonuses. *Journal of Financial Economics*, 73(1), 119-143.
- Guiso, L., Sapienza, P., & Zingales, L. (2004). The role of social capital in financial development. *American Economic Review*, 94(3), 526-556.
- Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *Journal of Finance*, 63(6), 2557-2600.
- Guiso, L., Sapienza, P., & Zingales, L. (2009). Cultural biases in economic exchange? *Quarterly Journal of Economics*, 124(3), 1095-1131.
- Guiso, L., Sapienza, P., & Zingales, L. (2011). Civic capital as the missing link. *Handbook of Social Economics*, 1, 417-480.
- Gupta, A., Raman, K., & Shang, C. (2018). Social capital and the cost of equity. *Journal of Banking & Finance*, 87, 102-117.
- Harford, J., Humphery-Jenner, M., & Powell, R. (2012). The sources of value destruction in acquisitions by entrenched managers. *Journal of Financial Economics*, 106(2), 247-261.
- Harford, J., & Li, K. (2007). Decoupling CEO wealth and firm performance: The case of acquiring CEOs. *Journal of Finance*, 62(2), 917-949.
- Hasan, I., He, Q., & Lu, H. (2020). The impact of social capital on economic attitudes and outcomes. *Journal of International Money and Finance*, Forthcoming.
- Hasan, I., He, Q., & Lu, H. (2021). Social Capital, Trusting, and Trustworthiness: Evidence from Peer-to-Peer Lending. *Journal of Financial and Quantitative Analysis*, Forthcoming.

- Hasan, I., Hoi, C. K., Wu, Q., & Zhang, H. (2017a). Does social capital matter in corporate decisions? Evidence from corporate tax avoidance. *Journal of Accounting Research*, 55(3), 629–668.
- Hasan, I., Hoi, C. K., Wu, Q., & Zhang, H. (2017b). Social capital and debt contracting: Evidence from bank loans and public bonds. *Journal of Financial and Quantitative Analysis*, 52(3), 1017–1047.
- Hayward, M. L., & Hambrick, D. C. (1997). Explaining the premiums paid for large acquisitions: Evidence of CEO hubris. *Administrative Science Quarterly*, 103–127.
- Higgins, E. T. (1987). Self-discrepancy: a theory relating self and affect. *Psychological Review*, 94(3), 319–340.
- Hilary, G., & Hui, K. W. (2009). Does religion matter in corporate decision making in America? *Journal of Financial Economics*, 93(3), 455–473.
- Hoi, C. K. S., Wu, Q., & Zhang, H. (2019). Does social capital mitigate agency problems? Evidence from Chief Executive Officer (CEO) compensation. *Journal of Financial Economics*, 133(2), 498–519.
- Huang, K., & Shang, C. (2019). Leverage, debt maturity, and social capital. *Journal of Corporate Finance*, 54, 26–46.
- Huang, Q., Jiang, F., Lie, E., & Yang, K. (2014). The role of investment banker directors in M&A. *Journal of Financial Economics*, 112(2), 269–286.
- Humphery-Jenner, M., & Powell, R. (2014). Firm size, sovereign governance, and value creation: Evidence from the acquirer size effect. *Journal of Corporate Finance*, 26, 57–77.
- Ishii, J., & Xuan, Y. (2014). Acquirer-target social ties and merger outcomes. *Journal of Financial Economics*, 112(3), 344–363.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76(2), 323–329.
- John, K., Knyazeva, A., & Knyazeva, D. (2015). Employee rights and acquisitions. *Journal of Financial Economics*, 118(1), 49–69.
- Karpoff, J. M., Lee, D. S., & Martin, G. S. (2008). The consequences to managers for cooking the books. *Journal of Financial Economics*, 88(2), 193–215.
- Kimbrough, M. D., & Louis, H. (2011). Voluntary disclosure to influence investor reactions to merger announcements: An examination of conference calls. *Accounting Review*, 86(2), 637–667.
- Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? A cross-country investigation. *Quarterly Journal of Economics*, 112(4), 1251–1288.

- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1997). Trust in large organizations. *American Economic Review*, 87(2), 333–338.
- Laeven, L. & Levine, R. (2008). Complex ownership structures and corporate valuations. *Review of Financial Studies*, 21(2), 579–604.
- Lee, K. H., Mauer, D. C., & Xu, E. Q. (2018). Human capital relatedness and mergers and acquisitions. *Journal of Financial Economics*, 129(1), 111–135.
- Li, D., Taylor, L. A., & Wang, W. (2018). Inefficiencies and externalities from opportunistic acquirers. *Journal of Financial Economics*, 130(2), 265–290.
- Li, X. (2013). Productivity, restructuring, and the gains from takeovers. *Journal of Financial Economics*, 109(1), 250–271.
- Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *Journal of Finance*, 72(4), 1785–1824.
- Loderer, C., & Martin, K. (1990). Corporate acquisitions by listed firms: The experience of a comprehensive sample. *Financial Management*, 17–33.
- Malmendier, U., & Tate, G. (2008). Who makes acquisitions? CEO overconfidence and the market's reaction. *Journal of Financial Economics*, 89(1), 20–43.
- Masulis, R. W., Wang, C., & Xie, F. (2007). Corporate governance and acquirer returns. *Journal of Finance*, 62(4), 1851–1889.
- Maury, B. & Pajuste, A. (2005). Multiple large shareholders and firm value. *Journal of Banking and Finance*, 29(7), 1813–1834.
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45(6), 633–644.
- McConnell, J. J., & Muscarella, C. J. (1985). Corporate capital expenditure decisions and the market value of the firm. *Journal of Financial Economics*, 14(3), 399–422.
- Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics*, 73(2), 201–228.
- Morck, R., Shleifer, A., & Vishny, R. W. (1990). Do managerial objectives drive bad acquisitions? *Journal of Finance*, 45(1), 31–48.
- Offenberg, D. (2009). Firm size and the effectiveness of the market for corporate control. *Journal of Corporate Finance*, 15(1), 66–79.
- Offenberg, D., Straska, M., & Waller, H. G. (2014). Who gains from buying bad bidders? *Journal of Financial and Quantitative Analysis*, 513–540.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*: Simon and Schuster.

- Putnam, R. D. (2007). E Pluribus unum: Diversity and community in the twenty-first century the 2006 Johan Skytte Prize Lecture. *Scandinavian Political Studies*, 30(2), 137–174.
- Posner, R. A. (2000). Antitrust in the new economy. *Antitrust Law Journal*, 68(3), 925–944.
- Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1994). *Making democracy work*: Princeton university press.
- Rajan, R., Servaes, H., & Zingales, L. (2000). The cost of diversity: The diversification discount and inefficient investment. *Journal of Finance*, 55(1), 35–80.
- Roll, R. (1986). The hubris hypothesis of corporate takeovers. *Journal of Business*, 59(2), 197–216.
- Sacconi, L., & Antoni, G. (2010). *Social capital, Corporate social responsibility, economic behaviour and performance*: Springer.
- Scharfstein, D. S., & Stein, J. C. (2000). The dark side of internal capital markets: Divisional rent-seeking and inefficient investment. *Journal of Finance*, 55(6), 2537–2564.
- Schmidt, B. (2015). Costs and benefits of friendly boards during mergers and acquisitions. *Journal of Financial Economics*, 117(2), 424–447.
- Song, W., Wei, J., & Zhou, L. (2013). The value of “boutique” financial advisors in mergers and acquisitions. *Journal of Corporate Finance*, 20, 94–114.
- Spagnolo, G. (1999). Social relations and cooperation in organizations. *Journal of Economic Behavior & Organization*, 38(1), 1–25.
- Srinivasan, S. (2005). Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members. *Journal of Accounting Research*, 43(2), 291–334.
- Straska, M., & Waller, H. G. (2014). Antitakeover provisions and shareholder wealth: A survey of the literature. *Journal of Financial and Quantitative Analysis*, 49(4), 933–956.
- Uhlener, C. J. (1989). “Relational goods” and participation: Incorporating sociability into a theory of rational action. *Public Choice*, 62(3), 253–285.
- Wang, C., & Xie, F. (2009). Corporate governance transfer and synergistic gains from mergers and acquisitions. *Review of Financial Studies*, 22(2), 829–858.
- Zak, P. J., & Knack, S. (2001). Trust and growth. *Economic Journal*, 111(470), 295–321.

Zhao, J. (2013). Entrenchment or incentive? CEO employment contracts and acquisition decisions. *Journal of Corporate Finance*, 22, 124–152.

**Table 1: Descriptive Statistics**

This table provides the summary statistics for the sample of 2832 completed M&A transactions between 2010 and 2019. *CAR(-2, 2)* is the cumulative abnormal returns of the acquirer surrounding the announcement date (date 0) generated over the event window of five days, from date -2 to 2. *SCAPITAL* is the social capital index of the county where the acquirer is located. *LN(DEALVAL)* is the natural logarithm of the deal value (\$ million). *SAMESTATE* is a dummy variable that equals one if the target and the acquirer are located in the same state and zero otherwise. *PUBLIC* is a dummy variable that equals one if the target is a public firm and zero otherwise. *STOCKRATIO* is the ratio of stock used as the method of payment. *TENDER* is a dummy variable that equals one if the transaction is identified as a tender offer and zero otherwise. *SAMEIND* is a dummy variable that equals one if the target and the acquirer operate in the same industry (defined by the first two digits of the SIC codes) and zero otherwise. *LN(AT)* is the natural logarithm of the acquirer's total assets. *LEVERAGE* is the acquirer's total debts scaled by its total assets. *ROA* is the acquirer's earnings before interest and taxes scaled by its total assets. *INVESTMENT* is the acquirer's total expenditures scaled by its total assets. *Q* is the market value of assets scaled by the book value of assets.

	N	Mean	Standard deviation	25th	Median	75th
<i>CAR(-2, 2)</i>	2832	0.012	0.066	-0.020	0.007	0.040
<i>SCAPITAL</i>	2832	-0.266	0.937	-1.120	-0.102	0.484
<i>LN(DEALVAL)</i>	2832	5.079	1.758	3.706	5.047	6.310
<i>SAMESTATE</i>	2832	0.193	0.395	0.000	0.000	0.000
<i>PUBLIC</i>	2832	0.276	0.447	0.000	0.000	1.000
<i>STOCKRATIO</i>	2832	0.100	0.245	0.000	0.000	0.000
<i>TENDER</i>	2832	0.042	0.200	0.000	0.000	0.000
<i>SAMEIND</i>	2832	0.573	0.495	0.000	1.000	1.000
<i>LN(AT)</i>	2832	7.554	1.795	6.259	7.408	8.740
<i>LEVERAGE</i>	2832	0.231	0.189	0.058	0.219	0.344
<i>ROA</i>	2832	0.086	0.078	0.050	0.090	0.129
<i>INVESTMENT</i>	2832	0.034	0.032	0.013	0.024	0.042
<i>Q</i>	2832	2.131	1.099	1.380	1.800	2.473

**Table 2:** Social Capital and the Acquirer's Announcement Returns

This table reports the regression results of the acquirer's announcement returns on social capital.  $CAR(-2, 2)$  is the cumulative abnormal returns of the acquirer surrounding the announcement date (date 0) generated over the event window of five days, from date -2 to 2.  $SCAPITAL(T\_SCAPITAL)$  is the social capital index of the county where the acquirer (target) is located.  $SCAP\_EX\_EFF$  is the county-level social capital index that accounts for three dimensions, i.e., family unity, community health, and institutional health. Definitions of other variables are shown in Appendix A. The standard errors clustered at the industry level are presented in parentheses. \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10%, respectively.

	$CAR(-2, 2)$		
	(1)	(2)	(3)
<i>SCAPITAL</i>	0.003** (2.45)	0.003** (2.38)	
<i>T_SCAPITAL</i>		0.001 (0.48)	
<i>SCAP_EX_EFF</i>			0.003* (1.90)
<i>LN(DEALVAL)</i>	0.006*** (5.55)	0.006*** (5.54)	0.006*** (5.58)
<i>SAMESTATE</i>	0.003 (0.69)	0.003 (0.69)	0.003 (0.74)
<i>PUBLIC</i>	-0.004* (-1.91)	-0.004* (-1.92)	-0.004* (-1.87)
<i>STOCKRATIO</i>	-0.020*** (-3.92)	-0.019*** (-3.82)	-0.020*** (-3.92)
<i>TENDER</i>	-0.000 (-0.03)	-0.000 (-0.04)	-0.000 (-0.06)
<i>SAMEIND</i>	0.003 (0.82)	0.003 (0.83)	0.003 (0.81)
<i>LN(AT)</i>	-0.008*** (-5.32)	-0.008*** (-5.34)	-0.008*** (-5.34)
<i>LEVERAGE</i>	0.024*** (4.22)	0.024*** (4.25)	0.024*** (4.25)
<i>ROA</i>	0.049* (2.02)	0.049* (2.02)	0.049* (2.04)
<i>INVESTMENT</i>	0.021 (0.36)	0.021 (0.36)	0.020 (0.34)
<i>Q</i>	-0.005*** (-3.85)	-0.005*** (-3.82)	-0.005*** (-3.88)
<i>CONSTANT</i>	0.046*** (4.34)	0.046*** (4.33)	0.045*** (4.33)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
No. of Obs.	2832	2832	2832
$R^2$	0.054	0.055	0.054



**Table 3:** Instrumented Regressions

This table provides instrumented regressions, using (i) racial fragmentation and religiosity, (ii) Democratic state indicator and ethnic homogeneity, (iii) racial fragmentation, religiosity, and Democratic state indicator as instruments for social capital. *CAR*(-2, 2) is the cumulative abnormal returns of the acquirer surrounding the announcement date (date 0) generated over the event window of five days, from date -2 to 2. *SCAPITAL* is the social capital index of the county where the acquirer is located. *RACE\_HFD* is the reverse measure of the racial fragmentation of the acquirer's county, measured by a Herfindahl index calculated across three racial categories: Black, White, and other races. *RELIGION* is the number of religious adherents in the acquirer's county scaled by the total population in that county. *BLUESTATE* is a dummy variable that equals one if the acquirer is located in a blue state and zero otherwise. *ETHNICITY\_HFD* is the ethnic homogeneity of the acquirer's county, measured by a Herfindahl index calculated across four basic ethnic categories: Hispanic, non-Hispanic white, non-Hispanic black, and Asian. Definitions of other variables are shown in Appendix A. Definitions of other variables are shown in Appendix A. The standard errors clustered at the industry level are presented in parentheses. \*\*\*, \*\*, and \* denote statistical significant at 1%, 5%, and 10%, respectively.

	<i>SCAPITAL</i>	<i>CAR</i> (-2, 2)	<i>SCAPITAL</i>	<i>CAR</i> (-2, 2)	<i>SCAPITAL</i>	<i>CAR</i> (-2, 2)
	(1)	(2)	(3)	(4)	(5)	(6)
<i>SCAP_HAT1</i>		0.003** (2.05)				
<i>SCAP_HAT2</i>				0.003** (2.04)		
<i>SCAP_HAT3</i>						0.003** (2.12)
<i>RACE_HFD</i>	5.481*** (41.80)				5.419*** (35.96)	
<i>RELIGION</i>	0.743*** (3.62)				0.657*** (3.52)	
<i>ETHNICITY_HFD</i>			3.331*** (12.76)			
<i>BLUESTATE</i>			0.499*** (8.34)		0.072 (1.41)	
<i>LN(DEALVAL)</i>	0.005 (0.57)	0.006*** (5.59)	-0.002 (-0.20)	0.006*** (5.58)	0.006 (0.74)	0.006*** (5.59)
<i>SAMESTATE</i>	-0.043 (-1.59)	0.004 (0.90)	0.165** (2.07)	0.003 (0.72)	-0.048* (-1.77)	0.004 (0.90)

<i>PUBLIC</i>	-0.068*** (-3.39)	-0.004* (-1.75)	-0.012 (-0.41)	-0.005* (-1.97)	-0.067*** (-3.39)	-0.004* (-1.75)
<i>STOCKRATIO</i>	0.126*** (2.85)	-0.018*** (-3.55)	0.060 (1.39)	-0.019*** (-3.76)	0.126*** (2.88)	-0.018*** (-3.54)
<i>TENDER</i>	-0.013 (-0.20)	-0.001 (-0.07)	-0.102 (-1.19)	0.000 (0.03)	-0.018 (-0.30)	-0.001 (-0.07)
<i>SAMEIND</i>	-0.023 (-1.08)	0.003 (0.78)	-0.028 (-0.82)	0.003 (0.77)	-0.022 (-1.03)	0.003 (0.78)
<i>LN(AT)</i>	0.036*** (5.14)	-0.008*** (-5.46)	0.020 (1.10)	-0.008*** (-5.77)	0.032*** (4.31)	-0.008*** (-5.46)
<i>LEVERAGE</i>	-0.193 (-1.17)	0.025*** (4.37)	-0.228 (-1.31)	0.026*** (4.58)	-0.171 (-1.02)	0.025*** (4.38)
<i>ROA</i>	-0.617** (-2.20)	0.049* (1.89)	-0.462 (-1.21)	0.052** (2.13)	-0.562* (-2.03)	0.049* (1.88)
<i>INVESTMENT</i>	-1.085* (-1.99)	0.016 (0.28)	-1.227** (-2.22)	0.027 (0.43)	-1.040* (-1.96)	0.016 (0.28)
<i>Q</i>	0.011 (0.68)	-0.005*** (-3.81)	0.031** (2.12)	-0.005*** (-3.88)	0.006 (0.40)	-0.005*** (-3.82)
<i>CONSTANT</i>	-5.322*** (-36.50)	0.045*** (4.33)	-2.389*** (-15.53)	0.045*** (4.33)	-5.249*** (-35.75)	0.045*** (4.33)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,794	2,794	2,754	2,754	2,794	2,794
<i>R</i> <sup>2</sup>	0.635	0.053	0.414	0.053	0.636	0.053

**Table 4:** Dimensions of Social Capital and the Acquirer's Announcement Returns

This table reports the regression results of the acquirer's announcement returns on county-level social capital. *CAR*(-2, 2) is the cumulative abnormal returns of the acquirer surrounding the announcement date (date 0) generated over the event window of five days, from date -2 to 2. *FAM\_UNITY* is the county-level family unity subindex, measured using the PCA method to generate weights for three indicators of family unity. *COM\_HEALTH* is the county-level sub-index, measured using the PCA method to generate weights for three indicators of community health. *INS\_HEALTH* is the county-level institutional health sub-index, measured using the PCA method to generate weights for three indicators of institutional health. *COL\_EFF* is the county-level collective efficacy (violent crime rate), a standalone indicator measured by the number of violent crimes per 100,000. Definitions of other variables are shown in Appendix A. The standard errors clustered at the industry level are presented in parentheses. \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10%, respectively.

	<i>CAR</i> (-2, 2)			
	(1)	(2)	(3)	(4)
<i>FAM_UNITY</i>	0.002 (1.68)			
<i>COM_HEALTH</i>		0.002 (0.95)		
<i>INS_HEALTH</i>			0.002 (1.45)	
<i>COL_EFF</i>				0.002** (2.30)
<i>LN(DEALVAL)</i>	0.006*** (5.55)	0.006*** (5.62)	0.006*** (5.57)	0.006*** (5.51)
<i>SAMESTATE</i>	0.002 (0.54)	0.003 (0.72)	0.003 (0.75)	0.003 (0.63)
<i>PUBLIC</i>	-0.004* (-1.87)	-0.004* (-1.85)	-0.004* (-1.86)	-0.005* (-2.01)
<i>STOCKRATIO</i>	-0.020*** (-3.88)	-0.019*** (-3.90)	-0.020*** (-3.91)	-0.019*** (-3.86)
<i>TENDER</i>	-0.000 (-0.04)	-0.001 (-0.11)	-0.000 (-0.05)	0.000 (0.00)
<i>SAMEIND</i>	0.003 (0.82)	0.003 (0.82)	0.003 (0.82)	0.003 (0.81)
<i>LN(AT)</i>	-0.008*** (-5.32)	-0.008*** (-5.30)	-0.008*** (-5.29)	-0.008*** (-5.30)
<i>LEVERAGE</i>	0.024*** (4.25)	0.023*** (4.16)	0.023*** (4.05)	0.023*** (4.10)
<i>ROA</i>	0.050* (2.05)	0.049* (2.00)	0.048* (1.98)	0.048* (1.99)
<i>INVESTMENT</i>	0.020 (0.34)	0.018 (0.30)	0.019 (0.32)	0.021 (0.36)
<i>Q</i>	-0.005*** (-3.81)	-0.005*** (-3.84)	-0.005*** (-3.87)	-0.005*** (-3.80)

<i>CONSTANT</i>	0.045***	0.047***	0.045***	0.046***
	(4.21)	(4.23)	(4.34)	(4.32)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
No. of Obs.	2832	2832	2832	2832
$R^2$	0.054	0.053	0.054	0.054

---

**Table 5:** Cross-sectional Analyses

This table reports the regression results of acquirer announcement return on social capital conditional on the supermajority required to approve a merger, the acquirer's percentage of blockholder ownership, the acquirer's firm size, the deal size, and the stock ratio for payment.  $CAR(-2, 2)$  is the cumulative abnormal returns of the acquirer surrounding the announcement date (date 0) generated over the event window of five days, from date -2 to 2. The main independent variable, *SCAPITAL*, is the social capital index of the county where the acquirer is located. *SUPERMAJORITY* is the supermajority required to approve a merger, specifically the voting percentage required to approve a merger decision. *BLOCKHOLDERS* is the blockholder percentage in the acquirer, i.e., the percentage of owners with five percent or more share ownership in the company.  $LN(AT)$  is the natural logarithm of the acquirer's total assets.  $LN(DEALVAL)$  is the natural logarithm of the deal value (\$ million). *STOCKRATIO* is the ratio of stock used as the method of payment. Definitions of other variables are shown in Appendix A. The standard errors clustered at the industry level are presented in parentheses. \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10%, respectively.

	<i>CAR(-2, 2)</i>				
	(1)	(2)	(3)	(4)	(5)
<i>SCAPITAL</i> × <i>SUPERMAJORITY</i>	0.006** (2.12)				
<i>SCAPITAL</i> × <i>BLOCKHOLDERS</i>		-0.024** (-2.33)			
<i>SCAPITAL</i> × $LN(AT)$			0.001* (2.13)		
<i>SCAPITAL</i> × $LN(DEALVAL)$				0.002* (2.01)	
<i>SCAPITAL</i> × <i>STOCKRATIO</i>					0.016** (2.54)
<i>SUPERMAJORITY</i>	-0.001 (-0.18)				
<i>BLOCKHOLDERS</i>		-0.012 (-1.11)			
<i>SCAPITAL</i>	0.001 (0.69)	0.008*** (2.96)	-0.008 (-1.46)	-0.006 (-1.32)	0.001 (0.78)
$LN(DEALVAL)$	0.004*** (3.80)	0.006*** (4.60)	0.006*** (3.78)	0.007*** (6.02)	0.006*** (5.44)
<i>SAMESTATE</i>	-0.002 (-0.68)	0.005 (1.02)	0.003 (0.61)	0.003 (0.66)	0.003 (0.79)
<i>PUBLIC</i>	0.000 (0.10)	0.000 (0.00)	-0.004 (-1.22)	-0.004* (-1.93)	-0.004* (-1.78)
<i>STOCKRATIO</i>	-0.025*** (-3.71)	-0.016*** (-2.83)	-0.019** (-2.83)	-0.019*** (-3.87)	-0.015*** (-2.87)
<i>TENDER</i>	0.006 (0.87)	0.002 (0.25)	0.000 (0.03)	0.000 (0.01)	-0.001 (-0.11)
<i>SAMEIND</i>	-0.000 (-0.20)	0.004 (1.53)	0.003 (0.68)	0.003 (0.81)	0.003 (0.83)
$LN(AT)$	-0.007***	-0.009***	-0.008***	-0.008***	-0.008***

	(-4.01)	(-4.91)	(-4.85)	(-5.32)	(-5.32)
<i>LEVERAGE</i>	0.027***	0.035***	0.023**	0.023***	0.022***
	(3.74)	(5.43)	(2.90)	(4.08)	(3.95)
<i>ROA</i>	-0.045	0.037	0.048	0.049*	0.049**
	(-1.23)	(1.52)	(1.65)	(2.00)	(2.08)
<i>INVESTMENT</i>	0.078	0.050	0.021	0.021	0.021
	(1.05)	(0.84)	(0.38)	(0.36)	(0.37)
<i>Q</i>	0.001	-0.002**	-0.005***	-0.005***	-0.005***
	(0.69)	(-2.52)	(-3.22)	(-3.77)	(-3.92)
<i>CONSTANT</i>	0.038***	0.040***	0.043***	0.043***	0.045***
	(3.39)	(5.65)	(4.16)	(4.13)	(4.40)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
No. of Obs.	1,786	1,985	2832	2832	2832
<i>R</i> <sup>2</sup>	0.065	0.076	0.056	0.056	0.057

---

**Table 6: Social Capital and Synergies**

This table reports regression results of synergies on social capital. *SYNERGY* is the value-weighted portfolio of cumulative abnormal returns of the target and the acquirer surrounding the announcement date (date 0), from date -2 to 2). The weights are measured as the target's and the acquirer's market capitalization values four weeks before the announcement date, scaled by the sum of their market capitalization. The main independent variable, *SCAPITAL*, is the social capital index of the county where the acquirer is located. Definitions of other variables are shown in Appendix A. The standard errors clustered at the industry level are presented in parentheses. \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10%, respectively.

	<i>SYNERGY</i>	
	(1)	(2)
<i>SCAPITAL</i>	0.006*** (2.21)	0.008** (2.60)
<i>LN(DEALVAL)</i>		0.014*** (4.93)
<i>SAMESTATE</i>		-0.002 (-0.45)
<i>PUBLIC</i>		0.029* (1.85)
<i>STOCKRATIO</i>		-0.025* (-1.81)
<i>TENDER</i>		-0.001 (-0.09)
<i>SAMEIND</i>		0.006 (1.20)
<i>LN(AT)</i>		-0.019*** (-10.77)
<i>LEVERAGE</i>		0.044*** (3.09)
<i>ROA</i>		0.136*** (3.08)
<i>INVESTMENT</i>		0.025 (0.21)
<i>Q</i>		-0.013*** (-5.21)
<i>CONSTANT</i>	0.041*** (59.99)	0.087*** (6.67)
Year FE	Yes	Yes
Industry FE	Yes	Yes
No. of Obs.	403	403
<i>R</i> <sup>2</sup>	0.113	0.254

**Table 7:** Social Capital and the Acquirer's Long-term Operating Performance

This table reports the regression results of the acquirer's long-term operating performance on social capital.  $\Delta ROA(-1, t)$  is the change in the acquirer's adjusted ROA, from the fiscal year right before (fyr -1) to  $t$  fiscal years after (fyr + $t$ ) the announcement date. We measure  $\Delta ROA(-1, t)$  for  $t$  values between +2 and +5. The main independent variable, *SCAPITAL*, is the social capital index of the county where the acquirer is located. Definitions of other variables are shown in Appendix A. The standard errors clustered at the industry level are presented in parentheses. \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10%, respectively.

	$\Delta ROA$ (-1, 2)	$\Delta ROA$ (-1, 3)	$\Delta ROA$ (-1, 4)	$\Delta ROA$ (-1, 5)
	(1)	(2)	(3)	(4)
<i>SCAPITAL</i>	0.002 (0.88)	0.005** (2.11)	0.005** (2.57)	0.004* (1.79)
<i>LN(DEALVAL)</i>	-0.004*** (-3.34)	-0.005*** (-3.62)	-0.001 (-0.50)	-0.002 (-0.62)
<i>SAMESTATE</i>	-0.004 (-0.68)	-0.001 (-0.10)	0.004 (0.41)	0.007 (0.51)
<i>PUBLIC</i>	-0.008 (-1.58)	-0.011** (-2.72)	-0.011** (-2.15)	-0.011 (-1.52)
<i>STOCKRATIO</i>	0.021*** (3.36)	0.020** (2.29)	0.007 (0.71)	0.016 (1.00)
<i>TENDER</i>	-0.018*** (-3.56)	-0.007 (-1.30)	-0.011 (-0.91)	-0.008 (-0.89)
<i>SAMEIND</i>	0.009** (2.70)	0.007 (1.18)	0.005 (0.63)	0.009 (1.03)
<i>LN(AT)</i>	0.008*** (5.83)	0.010*** (4.97)	0.011*** (5.59)	0.011*** (5.52)
<i>LEVERAGE</i>	0.002 (0.20)	0.003 (0.19)	-0.013 (-0.73)	-0.006 (-0.26)
<i>INVESTMENT</i>	-0.171 (-1.31)	-0.237 (-1.47)	-0.097 (-0.61)	-0.071 (-0.36)
<i>Q</i>	-0.007*** (-2.82)	-0.009** (-2.78)	-0.012** (-2.22)	-0.016*** (-3.67)
<i>CONSTANT</i>	-0.040*** (-3.02)	-0.046** (-2.21)	-0.067*** (-3.00)	-0.063*** (-3.39)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
No. of Obs.	2,147	1,826	1,512	1,187
$R^2$	0.080	0.092	0.101	0.095



**Table 8: Social Capital and the Acquirer's Long-term Stock Returns**

This table reports monthly average abnormal returns ( $\alpha$ ) of equally-weighted calendar time portfolio methods using Fama and French (1993) and Fama and French (2015)'s factors models. A single time series regression is run with the excess returns of the calendar portfolio as the dependent variable and the returns on the three, five, six, and seven factors as the independent variables, including *MKF*, the market portfolio's excess return; *SMB*, the difference in the returns between small and large market capitalization stock portfolios; *HML*, the difference in the returns between high book-to-market and low book-to-market stock portfolios; *RMW*, the difference between the returns on a diversified portfolio of stocks with robust and weak profitability; *CMA*, the difference in returns between high and low investment stock portfolios; *MOM*, the momentum factor; and *LIQ*, the liquidity factor. Panel A shows  $\alpha$  of the portfolio created by all acquirers. Panel B and C shows  $\alpha$  of the portfolio of acquirers located in low and high social capital counties, respectively. Panel D shows  $\alpha$  of the long-short strategy, i.e., taking a long position in the portfolio of acquirers located in a high social county and a short position in the portfolio of acquirers located in a low social capital county.

<b>Panel A: The long-term returns of all acquirers</b>				
	3 Factors	5 Factors	6 Factors	7 Factors
	(1)	(2)	(3)	(4)
$\alpha$	-0.002** (-2.05)	-0.002* (-1.78)	-0.001 (-1.13)	-0.001 (-1.06)
<i>MKF</i>	1.083*** (43.22)	1.073*** (42.11)	1.043*** (54.61)	1.042*** (54.33)
<i>SMB</i>	0.601*** (14.74)	0.584*** (13.29)	0.589*** (15.82)	0.590*** (15.88)
<i>HML</i>	-0.016 (-0.34)	0.008 (0.15)	-0.109** (-2.55)	-0.110** (-2.53)
<i>RMW</i>		-0.080 (-1.16)	-0.098* (-1.81)	-0.097* (-1.80)
<i>CMA</i>		-0.063 (-0.97)	-0.021 (-0.43)	-0.019 (-0.38)
<i>MOM</i>			-0.190*** (-7.73)	-0.191*** (-7.75)
<i>LIQ</i>				1.166 (0.79)
No. of Obs.	119	119	119	119
$R^2$	0.966	0.967	0.979	0.980
<b>Panel B: The long-term returns of low-social-capital acquirers</b>				
	3 Factors	5 Factors	6 Factors	7 Factors
	(1)	(2)	(3)	(4)
$\alpha$	-0.003*** (-2.77)	-0.003*** (-2.64)	-0.002** (-2.14)	-0.002** (-2.05)
<i>MKF</i>	1.092*** (40.12)	1.091*** (38.89)	1.061*** (44.30)	1.060*** (44.33)
<i>SMB</i>	0.612*** (13.12)	0.611*** (12.39)	0.617*** (13.42)	0.618*** (13.38)

<i>HML</i>	0.075 (1.39)	0.079 (1.40)	-0.038 (-0.68)	-0.039 (-0.68)
<i>RMW</i>		-0.005 (-0.06)	-0.023 (-0.33)	-0.022 (-0.31)
<i>CMA</i>		-0.011 (-0.15)	0.030 (0.42)	0.033 (0.45)
<i>MOM</i>			-0.190*** (-5.35)	-0.191*** (-5.35)
<i>LIQ</i>				1.233 (0.61)
No. of Obs.	119	119	119	119
$R^2$	0.956	0.956	0.968	0.968

**Panel C: The long-term returns of high-social-capital acquirers**

	3 Factors	5 Factors	6 Factors	7 Factors
	(1)	(2)	(3)	(4)
$\alpha$	-0.001 (-0.75)	-0.000 (-0.35)	0.000 (0.35)	0.000 (0.43)
<i>MKF</i>	1.077*** (32.28)	1.059*** (31.89)	1.030*** (35.30)	1.029*** (34.89)
<i>SMB</i>	0.584*** (11.73)	0.552*** (9.87)	0.557*** (11.45)	0.558*** (11.51)
<i>HML</i>	-0.108** (-2.03)	-0.061 (-0.92)	-0.175*** (-3.07)	-0.176*** (-3.05)
<i>RMW</i>		-0.149 (-1.57)	-0.167** (-2.03)	-0.166** (-2.02)
<i>CMA</i>		-0.119 (-1.20)	-0.079 (-0.95)	-0.077 (-0.92)
<i>MOM</i>			-0.185*** (-5.23)	-0.186*** (-5.20)
<i>LIQ</i>				1.224 (0.61)
No. of Obs.	119	119	119	119
$R^2$	0.946	0.948	0.960	0.960

**Panel D: The long-term returns of the long-short strategy**

	3 Factors	5 Factors	6 Factors	7 Factors
	(1)	(2)	(3)	(4)
$\alpha$	0.002 (1.18)	0.002 (1.53)	0.002 (1.44)	0.002 (1.40)
<i>MKF</i>	-0.016 (-0.43)	-0.032 (-0.90)	-0.031 (-0.82)	-0.031 (-0.82)
<i>SMB</i>	-0.026 (-0.50)	-0.057 (-0.97)	-0.057 (-0.97)	-0.057 (-0.97)
<i>HML</i>	-0.180*** (-3.76)	-0.137** (-2.09)	-0.133* (-1.76)	-0.133* (-1.75)
<i>RMW</i>		-0.143 (-1.36)	-0.142 (-1.33)	-0.142 (-1.33)
<i>CMA</i>		-0.109	-0.111	-0.111

		(-0.91)	(-0.92)	(-0.91)
<i>MOM</i>			0.007	0.007
			(0.13)	(0.13)
<i>LIQ</i>				-0.053
				(-0.02)
No. of Obs.	119	119	119	119
$R^2$	0.109	0.142	0.142	0.142

---

**Table 9: Social Capital and Deal Duration**

This table reports the regression results of deal duration on social capital.  $LN(1+DURATION)$  is the natural logarithm of one plus deal duration. Deal duration,  $DURATION$ , is the number of days between the effective date and the announcement date. The main independent variable,  $SCAPITAL$ , is the social capital index of the county where the acquirer is located. Definitions of other variables are shown in Appendix A. The standard errors clustered at the industry level are presented in parentheses. \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10%, respectively.

	$LN(1+DURATION)$		
	(1) Full Sample	(2) Cash ratio equals 100%	(3) Cash ratio <100%
$SCAPITAL$	-0.076** (-2.14)	-0.006 (-0.12)	-0.106** (-2.57)
$LN(DEALVAL)$	0.686*** (16.75)	0.643*** (14.06)	0.739*** (18.31)
$SAMESTATE$	-0.105 (-1.19)	-0.139 (-1.29)	-0.021 (-0.24)
$PUBLIC$	0.795*** (10.42)	0.915*** (9.68)	0.786*** (8.81)
$STOCKRATIO$	0.662*** (6.60)		
$TENDER$	-0.293* (-2.03)	-0.384* (-1.87)	-0.708*** (-5.13)
$SAMEIND$	0.036 (0.34)	-0.152 (-1.51)	0.167 (1.44)
$LN(AT)$	-0.085*** (-2.86)	-0.038 (-1.46)	-0.161*** (-4.12)
$LEVERAGE$	-0.156 (-0.85)	-0.686 (-1.56)	0.135 (0.50)
$ROA$	-1.388* (-1.98)	-1.126 (-1.46)	-2.245** (-2.38)
$INVESTMENT$	2.356* (1.83)	6.988*** (5.33)	0.210 (0.12)
$Q$	-0.003 (-0.10)	-0.052 (-1.23)	0.027 (0.71)
$CONSTANT$	-0.355* (-2.05)	-0.177 (-1.06)	-0.153 (-0.75)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
No. of Obs.	2,628	1,007	1,621
$R^2$	0.501	0.500	0.513

**Table 10:** Social Capital, Corporate Social Responsibility, and the Acquirer's Announcement Returns

This table reports the regression results of the acquirer's announcement returns on social capital with additional control for corporate social responsibility measures.  $CAR(-2, 2)$  is the cumulative abnormal returns of the acquirer surrounding the announcement date (date 0) generated over the event window of five days, from date -2 to 2. The main independent variable,  $SCAPITAL$ , is the social capital index of the county where the acquirer is located.  $CSR$  is the firm-level CSR performance that equals the sum of the net CSR scores for six qualitative dimensions of CSR.  $CSR\_D$  is a dummy variable that equals one if a firm has a positive value for  $CSR$ .  $CSR\_STR$  is the sum of the firm's CSR strengths across six dimensions.  $CSR\_CON$  is the sum of the firm's CSR concerns across six dimensions. Definitions of other variables are shown in Appendix A. The standard errors clustered at the industry level are presented in parentheses. \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10%, respectively.

	$CAR(-2, 2)$			
	(1)	(2)	(3)	(4)
$SCAPITAL$	0.003** (2.42)	0.003** (2.41)	0.003** (2.45)	0.003** (2.48)
$CSR$	0.001 (1.23)			
$CSR\_D$		0.004 (0.89)		
$CSR\_STR$			0.001 (1.54)	
$CSR\_CON$				0.001 (0.83)
$LN(DEALVAL)$	0.006*** (5.66)	0.006*** (5.48)	0.006*** (5.74)	0.006*** (5.46)
$SAMESTATE$	0.003 (0.78)	0.003 (0.78)	0.003 (0.80)	0.003 (0.80)
$PUBLIC$	-0.004* (-1.95)	-0.004* (-1.95)	-0.005* (-1.98)	-0.005* (-2.02)
$STOCKRATIO$	-0.019*** (-3.87)	-0.019*** (-3.83)	-0.019*** (-3.87)	-0.019*** (-3.84)
$TENDER$	-0.000 (-0.03)	-0.000 (-0.05)	-0.000 (-0.04)	-0.001 (-0.07)
$SAMEIND$	0.003 (0.96)	0.003 (0.96)	0.003 (0.99)	0.003 (0.96)
$LN(AT)$	-0.009***	-0.009***	-0.009***	-0.009***

	(-6.27)	(-6.14)	(-5.93)	(-5.15)
<i>LEVERAGE</i>	0.023***	0.022***	0.023***	0.022***
	(3.99)	(3.95)	(4.14)	(3.95)
<i>ROA</i>	0.050*	0.051**	0.050**	0.052**
	(2.05)	(2.09)	(2.06)	(2.15)
<i>INVESTMENT</i>	0.016	0.016	0.014	0.017
	(0.26)	(0.27)	(0.24)	(0.29)
<i>Q</i>	-0.005***	-0.005***	-0.005***	-0.005***
	(-3.75)	(-3.77)	(-3.75)	(-3.68)
Constant	0.048***	0.047***	0.049***	0.046***
	0.055	0.055	0.055	0.055
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	2,815	2,815	2,815	2,815
<i>R</i> <sup>2</sup>	0.055	0.055	0.055	0.055

---

**Table 11:** Social Capital and Alternative Measurements of the Acquirer's Announcement Returns

This table reports the regression results of the acquirer's announcement returns on social capital using alternative measurements of the acquirer's announcement returns.  $CAR(-t, t)$  is the cumulative abnormal returns of the acquirer surrounding the announcement date (date 0) generated over the event window of  $(2t+1)$  days, from date  $-t$  to  $t$ . The market-adjusted model, the Fama and French three factors model, and the Fama and French three models used to generate  $CAR(-t, t)$ . The main independent variable,  $SCAPITAL$ , is the social capital index of the county where the acquirer is located. Definitions of other variables are shown in Appendix A. The standard errors clustered at the industry level are presented in parentheses. \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10%, respectively.

Model	Market-Adjusted Model		Fama and French Three Factors	Fama and French Three Factors with Momentum
	$CAR(-1, 1)$	$CAR(-5, 5)$	$CAR(-2, 2)$	$CAR(-2, 2)$
	(1)	(2)	(3)	(4)
<i>SCAPITAL</i>	0.003* (1.98)	0.002** (2.45)	0.003** (2.54)	0.003** (2.58)
<i>LN(DEALVAL)</i>	0.006*** (4.18)	0.005*** (5.80)	0.005*** (5.05)	0.006*** (5.02)
<i>SAMESTATE</i>	0.006 (1.41)	0.002 (0.55)	0.003 (0.82)	0.003 (0.75)
<i>PUBLIC</i>	-0.002 (-0.85)	-0.002 (-1.28)	-0.004* (-1.76)	-0.004* (-1.89)
<i>STOCKRATIO</i>	-0.023*** (-3.35)	-0.022*** (-4.15)	-0.019*** (-4.01)	-0.020*** (-3.99)
<i>TENDER</i>	-0.003 (-0.39)	-0.001 (-0.21)	0.001 (0.20)	0.001 (0.14)
<i>SAMEIND</i>	0.004 (1.50)	0.002 (0.83)	0.003 (0.90)	0.003 (0.97)
<i>LN(AT)</i>	-0.009*** (-4.89)	-0.008*** (-5.74)	-0.007*** (-5.08)	-0.007*** (-4.83)
<i>LEVERAGE</i>	0.032*** (4.99)	0.019*** (3.33)	0.020*** (3.74)	0.020*** (3.58)
<i>ROA</i>	0.049 (1.60)	0.032 (1.32)	0.055** (2.49)	0.055** (2.58)
<i>INVESTMENT</i>	0.010 (0.15)	-0.003 (-0.07)	0.004 (0.08)	0.016 (0.31)
<i>Q</i>	-0.004*** (-2.80)	-0.004*** (-3.47)	-0.005*** (-5.44)	-0.005*** (-5.38)
<i>CONSTANT</i>	0.046*** (4.60)	0.045*** (4.72)	0.040*** (4.17)	0.039*** (3.94)
Year FE	Yes	Yes	Yes	Yes

Industry FE	Yes	Yes	Yes	Yes
Observations	2,832	2,832	2,832	2,832
$R^2$	0.053	0.056	0.050	0.052

---



**Table 12:** Alternative Measurements of Social Capital

This table reports the regression results of the acquirer's announcement returns on social capital using alternative measurements of social capital. *CAR*(-2, 2) is the cumulative abnormal returns of the acquirer surrounding the announcement date (date 0) generated over the event window of five days, from date -2 to 2. *EW\_SCAPITAL* is the county-level social capital index generated using equal weights for the four components of *SCAPITAL*. *SC\_POSITIVE* is a dummy variable that equals one if the social capital of the acquirer's county, *SCAPITAL* is positive and zero otherwise. *SC\_HIGH* is a dummy variable that equals one if the social capital of the acquirer's county, *SCAPITAL* is equal to or greater than the median of the M&A sample and zero otherwise. Definitions of other variables are shown in Appendix A. The standard errors clustered at the industry level are presented in parentheses. \*\*\*, \*\*, and \* denote statistical significance at 1%, 5%, and 10%, respectively.

	<i>CAR</i> (-2, 2)		
	(1)	(2)	(3)
<i>EW_SCAPITAL</i>	0.004** (2.45)		
<i>SC_POSITIVE</i>		0.004* (1.77)	
<i>SC_HIGH</i>			0.004* (1.96)
<i>LN(DEALVAL)</i>	0.006*** (5.56)	0.006*** (5.58)	0.006*** (5.61)
<i>SAMESTATE</i>	0.003 (0.70)	0.003 (0.66)	0.003 (0.64)
<i>PUBLIC</i>	-0.004* (-1.97)	-0.004* (-1.81)	-0.004* (-1.88)
<i>STOCKRATIO</i>	-0.019*** (-3.90)	-0.020*** (-3.90)	-0.020*** (-3.89)
<i>TENDER</i>	-0.000 (-0.02)	-0.000 (-0.06)	-0.000 (-0.04)
<i>SAMEIND</i>	0.003 (0.80)	0.003 (0.82)	0.003 (0.80)
<i>LN(AT)</i>	-0.008*** (-5.33)	-0.008*** (-5.23)	-0.008*** (-5.28)
<i>LEVERAGE</i>	0.024*** (4.23)	0.024*** (4.27)	0.024*** (4.25)
<i>ROA</i>	0.049* (2.02)	0.050* (2.03)	0.050* (2.04)
<i>INVESTMENT</i>	0.021 (0.37)	0.018 (0.31)	0.019 (0.33)
<i>Q</i>	-0.005*** (-3.85)	-0.005*** (-3.76)	-0.005*** (-3.91)

<i>CONSTANT</i>	0.046*** (4.34)	0.044*** (4.28)	0.043*** (4.19)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Observations	2,831	2,832	2,832
$R^2$	0.054	0.054	0.054

---

**Table 13:** Pseudo-Analyses of Social Capital and the Acquirer's Announcement Returns

This table reports the regression results of the acquirer's announcement returns on social capital using pseudo-analyses. The first row reports the coefficients of *SCAPITAL* in the baseline model. The second row reports the averages and standard deviations of the bootstrapped coefficients of *SCAPITAL*. The third row show results of the distances between the baseline *SCAPITAL* and the mean of bootstrapped *SCAPITAL*, measured as the number of standard deviations of bootstrapped *SCAPITAL*. The four columns describe four pseudo analyses. In Column (1), we select a pseudo value of *SCAPITAL* randomly from all the values of *SCAPITAL* in our final sample for each M&A transaction. In Column (2), we obtain a pseudo-announcement date randomly from the sample of dates that satisfies the following two criteria: (i) The dates differ from the actual M&A announcement date; and (ii) The dates belong to the same year as the actual M&A announcement date. In Column (3), we randomly choose a pseudo-acquirer from a pool of non-acquirer firms listed in CRSP and Compustat in the same year. In Column (4), we randomize both the announcement date and the acquirer. We re-run the baseline regression to obtain the coefficient of *SCAPITAL*, repeating this process 1,000 times.

	CAR(-2, 2)			
	Pseudo <i>SCAPITAL</i>	Pseudo Announcement date	Pseudo Acquirer	Pseudo Acquirer and Announcement date
	(1)	(2)	(3)	(4)
<i>Baseline SCAPITAL</i>	0.003**	0.003**	0.003**	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)
<i>Bootstrapped SCAPITAL</i>	-0.00004	0.00017	-0.00024	-0.00003
	(0.00137)	(0.00080)	(0.00107)	(0.00111)
<i>Normality tests of bootstrapped SCAPITAL</i>				
<i>Baseline coefficient of SCAPITAL as the number of standard deviations from the mean of bootstrapped coefficients of SCAPITAL</i>	2.19	3.75	2.80	2.70