

ACCESS TO FINANCE AND CORPORATE SOCIAL RESPONSIBILITY: EVIDENCE FROM A NATURAL EXPERIMENT

The concept of corporate social responsibility (CSR), which has been defined as firms' responsibility for their impact on society (Williamson et al., 2014), has evolved from an idea that was perceived as inconsistent with shareholder value creation (e.g., Friedman, 1970; Jensen, 2002) to a central component in firms' strategy (Hawn & Ioannou, 2014; Porter & Kramer, 2011). In recent decades, CSR has received a significant amount of attention in the academic literature, with numerous studies examining the relationship between CSR investments and firm financial performance. Despite being voluminous, this literature has thus far produced equivocal results (Margolis, Elfenbein & Walsh, 2007). A general challenge for the literature is the potentially endogenous nature of the relationship between CSR investments and firm financial performance due to factors such as reverse causality. Stronger financial performance might be caused by investments into CSR or, alternatively, higher CSR investments might stem from better firm performance. Illustratively, Margolis et al. (2007) conclude in their review that the correlation between CSR investments and firm performance can largely be explained by firms' prior financial performance, a conclusion in line with that of other (meta-) studies (e.g. Krüger, 2009; Orlitzky et al., 2003). More importantly, the relationship between financial performance and CSR investments is stronger than the reverse. Although this is an imperative finding for a better understanding of the complex relationships between CSR and firm performance, it is one that "tend[s] to get overlooked" (Margolis, Elfenbein, & Walsh, 2007: 24). In this paper, we provide causal evidence that changes in firms' cost of financing affect subsequent CSR investments.

To overcome the serious challenge of endogeneity, we make use of an exogenous variation in firms' cost of internal financing that was generated by the passage of the American Jobs Creation Act (AJCA) of 2004. The act provided a significant and one-off reduction in tax-related costs to profits repatriated from foreign subsidiaries back to the U.S.-based parent firm (the tax rate was lowered to 5.25 percent from the standard 35 percent). Signing the AJCA into law induced an exogenous variation in firms' internal costs of financing, which allows us to test for a causal relationship between a reduction in firms' internal cost of finance and their investments into CSR.

We empirically test the relationship between financial performance and CSR investments with a sample of firms listed in the Standard & Poor's 1500 stock market index (S&P 1500) as well as in the Kinder, Lydenberg, Domini & Co. (KLD) social performance database, which we use to measure CSR. Information on firms' repatriation activity is not readily available in databases and had to be collected manually from thousands of firm filings. We use a difference-in-difference (DiD) approach to isolate the effect of the act on firms' CSR investments. The results clearly indicate that reductions in firms' internal cost of financing lead to increases in CSR investments. We also provide causal evidence that the effect of reduced internal cost of financing differs based on firms' level of financial constraints prior to the act. Unconstrained firms increased their investments into CSR, whereas constrained firms decreased their CSR investments in absolute terms and relative to firms that were unconstrained.

As the decision to repatriate under the AJCA is made by managers it is endogenous. To account for this, we estimated a predicted probability of repatriation — $\text{Pr}(\text{AJCA})_{it}$ — using a logistic regression. The predicted probability allows us to distinguish between firms that could not repatriate (group 1) — for example, because they did not have any foreign earnings— from firms that could repatriate but chose not to (group 2) and from firms that did repatriate (group 3)

combine. To correctly identify treatment and control groups we follow Faulkender and Petersen (2012) and isolate the effect of the act for firms that had an opportunity to repatriate and did repatriate (group 3) as opposed to those that had an opportunity to repatriate but did not repatriate (group 2). More specifically, we estimate the following equation:

$$CSR = \beta_0 \Pr(AJCA)_{it} + \beta_1 [AJCA_{it} - \Pr(AJCA)_{it}] + \beta_2 X_{it} + \lambda_i + \mu_t + \epsilon_{it} \quad (1)$$

Variation across the sample in firms' probability of repatriation is captured by β_0 . The coefficient β_1 measures the variation in firms' actual decision to repatriate holding probability of repatriation constant. Hence, β_1 is the sole effect of the act for repatriating firms (group 3) vs non-repatriating firms (group 2). X_{it} contains the control variables used in the estimation. We further include firm (λ_i), and time (μ_t) fixed effects. Time dummies account for yearly changes in the general business environment that are common to all firms. Firm fixed effects control for unobserved heterogeneity on the level of the individual firm that is constant over time. Including each firm as a control means that we are running a dummy variable regression equivalent to a Fixed Effects (FE) estimator. An assumption of FE estimators is the absence of serial correlation in the error terms, which we address by using standard errors clustered by firm, a procedure that also accounts for heteroskedasticity.

We extend the previous specification to additionally account for the level of financial constraints firms faced prior to the act, firm's level of social performance, firm's quality of corporate governance characteristics as well as the level of media coverage in the years prior to the act.

$$CSR = \beta_0 \Pr(AJCA)_{it} + \beta_1 [AJCA_{it} - \Pr(AJCA)_{it}] + \beta_2 [AJCA_{it} - \Pr(AJCA)_{it}] * Fin\ Constraints + \beta_3 X_{it} + \lambda_i + \mu_t + \epsilon_{it} \quad (2)$$

When interacting with the measure of financial constraints, for example, β_1 captures the effect of the act for the unconstrained repatriating firms. The coefficient β_2 captures the effect of the act for financially constrained repatriating firms relative to financially unconstrained repatriating firms while holding probability of repatriation constant.

We make important contributions to several streams of literature. We contribute to recent empirical studies examining the direction of causality between firm's social and financial performance. We add to this stream of literature by providing evidence of a causal effect of improved access to finance through lower cost of capital on firms' social performance. Also, we contribute to the vibrant literature studying the drivers of firms' social performance. In addition, the results of our paper challenge the scholarship based on agency theory, which suggests that social performance is an outcome of agency problems (Benabou and Tirole, 2010; Jensen and Meckling, 1976) or that it is an outcome of managerial entrenchment (Cespa and Cestone, 2007). We find evidence for the opposite. The reduction in the cost of financing does not lead to higher social performance among firms with weak corporate governance.

REFERENCES AVAILABLE FROM AUTHORS