

Does Firm Size Confound the Relationship Between Corporate Social Performance and Firm Financial Performance?

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ABSTRACT. There has been some theoretical and empirical debate that the positive relationship between corporate social performance (CSP) and firm financial performance (FFP) is spurious and in fact caused by a third factor, namely large firm size. This study examines this question by integrating three meta-analyses of more than two decades of research on (1) CSP and FFP, (2) firm size and CSP, and (3) firm size and FFP into one path-analytic model. The present study does not confirm size as a third factor which would confound the relationship between CSP and FFP. That is, even if firm size is controlled for across studies (comprising, on average, over 15 000 observations), CSP and FFP remain positively correlated, showing a “true-score” corrected path coefficient p of 0.37.

KEY WORDS: confounding variable, corporate social performance, firm financial performance, firm size, measurement error, meta-analysis, path analysis, reliability coefficient, sampling error, study artifacts

ABBREVIATIONS: CSP = corporate social performance; FFP = firm financial performance

In a recent *Journal of Business Ethics* article, Stanwick and Stanwick (1998) demonstrated empirically that in five out of six years, both firm size and profitability showed a significant relationship with corporate social performance

(CSP) in several multiple regression equations. Stanwick and Stanwick's (1998) findings contribute to the growing evidence, showing that CSP and firm financial performance (FFP) are positively correlated, at least under certain circumstances (e.g., Ullmann, 1985; Waddock and Graves, 1997; Wartick and Cochran, 1985; Wood and Jones, 1995). However, Stanwick and Stanwick's (1998) conclusions are limited to their specific sample (*Fortune 500* companies) and operationalizations of CSP (*Fortune Corporate Reputation Index*). Their findings raise the suspicion, though, that firm size may be an exogenous determinant of both CSP and FFP in a variety of cases. That is, we may find that the significantly positive path coefficient between CSP and FFP disappears once firm size is entered as a third variable (Chen and Metcalf, 1980).

The present study integrates, in a meta-analysis, 41 different CSP-size correlations and combines this quantitative review with Gooding and Wagner's (1985) meta-analysis of the empirical relationship between firm size and FFP. Through the addition of Orlitzky's (1998) meta-analytic data set of CSP-FFP correlations, a three-variable path diagram can be developed. Figure 1 presents the theoretical model upon which this empirical study is based. Figure 1 postulates that there may be positive paths between firm size and CSP, on the one hand, and firm size and FFP, on the other. Thus, firm size may be the real determinant of both CSP and FFP and, thus, may cause the positive bivariate relationship between CSP and FFP to be spurious.

Instead of conducting a primary study of this potentially confounding effect of firm size, the

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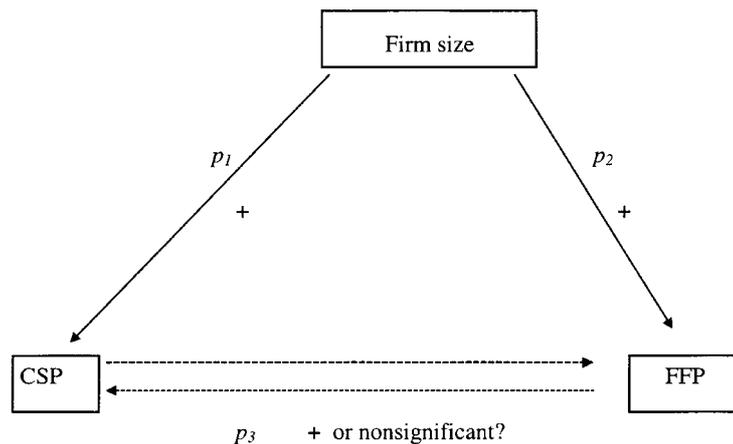


Figure 1. Full path-analytic model.

decision was made to undertake a meta-analysis for several reasons. First, unlike a primary study, meta-analysis can correct for at least two study artifacts, sampling error and measurement error (i.e., lack of reliability). Second, meta-analytic results may form the basis of path analyses (Hunter and Schmidt, 1990), which can, unlike multiple regression results, depict collinear relationships among two independent variables. Third, and probably most important, meta-analysis does not rely on a limited sample of firms (e.g., *Fortune 500* companies) and particular operationalizations of CSP (e.g., on the dubious *Fortune Reputation Index*; cf. Wood, 1995), FFP, and firm size. In other words, meta-analysis can pay tribute to the conceptual multidimensionality and “multiple operationism” of CSP (Cook and Campbell, 1979; Cooper, 1989; Webb et al., 1981).

It should be noted that this study is not concerned with firm size as a *moderator* of the CSP-FFP relationship. The moderator hypothesis would state that the CSP-FFP relationship would systematically vary with the given level of firm size, but not that the CSP-FFP relationship would vanish once size is added to the equation. Undoubtedly, the moderator hypothesis would be valuable to pursue, but it requires a very different approach from the one chosen in this study. The moderator hypothesis would have to be examined by dividing the (primary-study or meta-analytic) sample into distinct size

subgroups, as Pinkston and Carroll (1993), for example, had done in their primary study, investigating to what extent social responsibility orientations, organizational stakeholders, and social issues differ among firms of differing sizes. Theoretically, the moderator hypothesis was not considered as urgent as the question about the potential spuriousness of the CSP-FFP relationship, which may be confounded by size. Practically, the moderator analysis also was not pursued because all primary-study authors would have to provide size subgroup correlation results between CSP and FFP. These data may either not exist anymore or be statistically unstable in primary studies because already relatively small sample sizes (e.g., Anderson and Frankle, 1980; Bowman, 1978; Fogler and Nutt, 1975) would be decreased even further in those subgroup analyses.

The path model's causal relations

Modern stakeholder theory, transaction cost economics, agency theory, and the resource-based view of the firm can be used as theoretical explanations for a positive relationship between CSP and FFP. These theoretical explanations are developed in depth elsewhere (e.g., Aupperle et al., 1985; Clarkson, 1995; Donaldson and Preston, 1995; Freeman and Evan, 1990; Griffin and Mahon, 1997; Hill and

Jones, 1992; Jones, 1995; McGuire et al., 1988; Orlitzky, 1998; Russo and Fouts, 1997; Stanwick and Stanwick, 1998; Starik and Carroll, 1991; Ullmann, 1985; Waddock and Graves, 1997; Wartick and Cochran, 1985; Wood and Jones, 1995). The key findings in these other studies were twofold. First, the generally positive relationship between CSP and FFP tends to vary, depending on, for instance, what general strategies are pursued, what stakeholders are considered, and how CSP and FFP are measured. Second, if sampling error and measurement error are corrected statistically, the CSP-FFP correlation becomes stronger and more predictably positive (Orlitzky, 1998).

Although the theoretical explanations (with CSP as a predictor of FFP) will not be reviewed here, it should be noted that FFP might also predict CSP positively ("slack resources theory"; Waddock and Graves, 1997). The theoretically possible, and empirically supported, bidirectional causality between CSP and FFP (Orlitzky, 1998; Waddock and Graves, 1997) explains the two arrows between CSP and FFP in Figure 1. This paper will go into some greater theoretical detail with respect to the other two causal arrows depicted in Figure 1, namely those between (a) CSP and firm size and (b) firm size and FFP.

CSP, defined as "a business organization's configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm's societal relationships" (Wood, 1991, p. 693), and firm size, defined as the "scale of operations in an organization" (Price and Mueller, 1986, p. 233; cf. Kimberly, 1976), may be positively related because larger firms have greater visibility and, thus, engage in more and better social performance initiatives than smaller firms with relatively lower visibility (Chen and Metcalf, 1980). This may occur because an expanding firm attracts more attention from various stakeholder groups, to whose demands the large firm needs to respond more attentively (Burke et al., 1986; Waddock and Graves, 1997). In addition, small firms need an entrepreneurial spirit at the helm in order to grow. Often, those entrepreneurial strategies in early stages of firm

growth demand an emphasis on a more basic economic orientation rather than on Carroll's (1979) legal, ethical, and philanthropic responsibilities (Aupperle et al., 1990; Pinkston and Carroll, 1993). Because of these external and internal reasons, firm size would be expected to be a positive predictor of CSP (see Figure 1).

At the same time, firm size could also be positively related to FFP because firm size may lead to net economies of scale in manufacturing operations (Thompson, 1967), greater control over external stakeholders and resources (Aldrich and Pfeffer, 1976; Pfeffer and Salancik, 1978), and increased promotional opportunities resulting in the attraction and retention of better employees (Mueller, 1969; Stanford, 1980; Williamson, 1975). For all these reasons, firm size may be a positive predictor of FFP (Gooding and Wagner, 1985; see also Figure 1).

When all theoretical linkages are considered, Figure 1 is a model in which firm size would confound the relationship between CSP and FFP. In other words, the positive bivariate correlation between CSP and FFP might become insignificant as soon as firm size would be added as a third variable. Chen and Metcalf (1980) would call size a "background factor." To consider size as a confounding variable of the CSP-FFP path coefficient, the following three conditions would arguably have to be met. First, CSP would have to be shown to be positively related to size (path coefficient p_1). Second, CSP would have to be positively correlated with FFP. And finally, the previously significant path coefficient p_3 between CSP and FFP without size would have to decrease to statistical nonsignificance once size is also related to FFP (path coefficient p_2). Combined with the results from the path model, the results from these three regression equations (the first two conditions are bivariate correlations, the third one is a multiple regression) can provide empirical answers to the following research question under investigation here.

Research Question: Does firm size confound the relationship between CSP and FFP?

TABLE I
Studies included in size-CSP meta-analysis

| Author(s) (year) | <i>N</i> | Observed r^b | Number of r^c s reported | Measure of CSP ^a | Measure of size | Reliability of CSP ^c |
|--------------------------------------|----------|----------------|----------------------------|--|---|---------------------------------|
| Blackburn, Doran, and Shrader (1994) | 75 | -0.04 | 1 | CEP Ratings (SA/P/O) | Number of employees, number of shareholders | |
| Cowen, Ferreri, and Parker (1987) | 10 to 15 | -0.25 to 0.14 | 9 | Number of various CSR1 disclosures (D) | Fortune rank | |
| Dooley and Lerner (1994) | 86 | 0.12 | 1 | Stakeholder orientations/emphasis (CSR1) | Number of employees | |
| Goodstein (1992) | 1649 | 0.17 | 1 | Dichotomous survey measure of adoption of child care services (SA/P/O) | In of total number of employees | |
| Graves and Waddock (1994) | 430 | -0.06, 0.02 | 2 | Kinder, Lydenberg, Domini (KLD) measure (SA/P/O) | Total assets, total sales | |
| Griffin and Mahon (1997) | 7 | 0.47 | 1 | Fortune rating, KLD score, Toxics Release Inventory (TRI, reverse-coded), philanthropy (R, SA/P/O) | In of total assets | 0.35, 0.73 |
| Hansen and Wernerfelt (1989) | 60 | -0.25 | 1 | Emphasis on welfare of employees and good working conditions (survey) (CSR1) | In of total assets | |
| Kedia and Kuntz (1981) | 29 | 0.004 | 1 | 5 measures of actual CSP outcomes (SA/P/O) | Total assets | 0.05 |
| Levy and Shatto (1980) | 55 | 0.78 | 1 | Charitable contributions to different causes (SA/P/O) | Owners' equity | |
| Marcus and Goodman (1986) | 48 | 0.025 to 0.05 | 3 | Compliance with air pollution regulation | Total assets, net worth, sales | |

| | | | | | | |
|--|--------|---|---|--|--|------------|
| McGuire, Sundgren, and Schneeweis (1988) | 120 | 0.17 | 1 | Fortune “responsibility to community/environment” ratings (R) | Total assets | 0.90, 0.47 |
| Pava and Krausz (1995) | 12, 14 | 0.61 (<i>t</i>), 0.63 (<i>t</i>) | 2 | Dichotomization based on Council on Economic Priorities rankings (SA/P/O) | Total assets, lines of business | |
| Pinkston and Carroll (1993) | 131 | 0.05 (<i>t</i>) | 1 | Aupperle’s value measure (CSR1) | Sales (in \$) | |
| Reimann (1975) | 19 | 0.17 | 1 | Osgood’s Semantic Differential measure of public values (CSR1) | Log of total number of FT employees | |
| Roberts (1992) | 130 | 0.14 | 1 | CEP measure of social disclosure, philanthropic foundation? (Y/N) (SA/P/O) | In of average revenues (1981–84) | 0.36 |
| Russo and Fouts (1997) | 486 | −0.06 | 1 | Franklin Research and Development corp. environmental performance ratings (SA/P/O) | Log of sales | |
| Trotman and Bradley (1981) | 83 | 0.20, 0.22 | 2 | Social responsibility disclosures (D) | Total assets, sales volume | |
| Turban and Greening (1997) | 160 | −0.19 to 0.31 | 6 | KLD ratings (5 dimensions), Reputation (SA/P/O, R) | Total assets | 0.23, 0.18 |
| Useem (1991) | 180 | −0.205, 0.235 | 2 | Corp. contributions (SA/P/O) | Number of national operations (log states), log of total number of employees | |
| Waddock and Graves (1997) | 469 | −0.015 to 0.02 | 3 | 8 KLD dimensions (SA/P/O) | Total sales, total assets, total number of employees | |

^a Classification of CSP (in parentheses): D = disclosures/content analysis; R = reputational indices; SA/P/O = Social audit, process, and outcome measures; CSR1 = Aupperle’s and others’ measures of corporate principles and values.

^b (*t*): refers to transformation procedure; usually *t*-test statistic converted to PM *r*; in some cases, transformation of *d* to *r*.

^c Reliability of organizational size was the average of inter-measure correlations reported by Waddock and Graves (1997)

Methods

Literature search

To conduct this three-variable meta-analysis, three different bivariate relationships had to be meta-analyzed. First, previous studies on the relationship between CSP and firm size had to be meta-analyzed. Table I presents an overview of the size-CSP studies included. Second, for the CSP-FFP relationships, Orlitzky's (1998) meta-analytic data set and analyses were used. The studies comprising the CSP-FFP meta-analytic data set are presented in the References. Third, for the firm size-FFP relationship, the results from Gooding and Wagner's (1985) meta-analysis were borrowed and inserted into the model.

To argue that the data aggregated by Gooding and Wagner (1985) cannot be integrated with the other, more recent studies is tantamount to an argument that the relationship has changed over time. In this case, there is no theoretical reason why the size-FFP would have become larger or smaller since the mid-1980s. Furthermore, Kayande and Bhargava (1994) show that the performance-organizational size relationship is stable over time (cf. also Capon et al., 1990; Gooding and Wagner, 1985). In addition, of all studies examining general temporal effects in meta-analyses, only one study (Datta and Narayanan, 1989) on the concentration-performance relationship showed significant temporal patterns (in this case, a weakening of the concentration-performance relationship between 1936 and 1972; Kayande and Bhargava, 1994).

Criteria for relevance

The studies that were deemed relevant for the meta-analysis of firm size and CSP had the following characteristics. First, the studies quantitatively examined the relationship between CSP and firm size. The reported effect size did not have to be a Pearson's product-moment correlation r , but could also be a t -test statistic or effect size d (both t and d can be transformed to r ; Hunter and Schmidt, 1990). Second, the studies were concerned with at least one operational-

ization of firm size, whether it be annual sales, total amount of assets in dollars, or number of employees, for example (Gooding and Wagner, 1985; Kimberly, 1976; Price and Mueller, 1986). Third, all retrieved studies were double-checked for conforming to Wood's (1991) definition of CSP. The relevance criteria for the last two meta-analyses can be found in these other studies (Gooding and Wagner, 1985; Orlitzky, 1998).

Operationalizations of firm size, CSP, and FFP differed from one study to the next. "Multiple operationism," however, is not a problem, but a strength (Cook and Campbell, 1979; Cooper, 1989; Webb et al., 1981). Positive correlations between different operationalizations (e.g., amount of sales revenue and number of employees in the case of firm size) indicate the measurement of the same underlying construct and do not impair the validity of the meta-analysis.

While the literature on CSP differs from the one on corporate environmental performance in many respects, studies of environmental management are included in the meta-analysis as a subcategory of CSP for two reasons. First, stakeholder proxies, such as environmental interest groups and government agencies, to which Freeman's (1984) process approach to stakeholder management applies, may in fact give a voice to non-human nature. Second, it is reasonable to assume that the natural environment in and of itself is an important stakeholder (Starik, 1995).

Characteristics of primary studies

The most important study characteristics, such as author(s), date of study, sample size N , observed r or transformed and/or partially corrected r (i.e., corrected for dichotomization and unequal sample sizes in the two groups compared in a t -test), number of correlations per study, operationalizations of CSP and size, and estimates of reliability of CSP are reported in Table I. Often, reliability ($1 - \text{measurement error}$), which is defined as the ratio of true-score variance to observed-score variance (Traub, 1994), was estimated by the coefficient of generalizability (Cronbach, Gleser and Rajaratnam, 1963). The

corrections for measurement error are based on Orlitzky's (1998) tabulation of CSP and FFP reliability coefficients, which is more complete than Table I. The reliability of size is based on correlations between different operationalizations of size (cf. Waddock and Graves, 1997). The average of these correlations was calculated to be 0.67. The meta- and path-analytic results correct for this relatively low level of inter-measure reliability and the other, relatively low levels of reliability. In other words, low reliability does not artificially attenuate study results as they would in primary empirical studies.

Statistical conventions used in the meta-analysis

The meta-analysis uses Hunter and Schmidt's (1990) statistical aggregation techniques for cumulating correlations and correcting for various artifacts. According to psychometric theory, study artifacts, including sampling error and measurement error, attenuate observed correlations in certain specifiable ways. Sampling error is defined as $\sigma_e = (1 - \rho^2)/\sqrt{(N-1)}$, while measurement error refers to lack of reliability. Through the use of Hunter and Schmidt's meta-analytic techniques, corrections can be made to obtain a "true-score" correlation (ρ) between CSP and firm size.

Since not all measurement error data points were available for each study, study correlations cannot be corrected individually for measurement error. Instead, correlations are meta-analyzed using artifact distributions. Artifact-distribution meta-analysis first computes the means and variances of observed correlations and of the measurement error in CSP, FFP, or firm size. Then, the distribution of observed correlations is corrected for sampling error. Finally, the distribution corrected for sampling error is corrected for measurement error (Hunter and Schmidt, 1990).

Schmidt's computer program INTNL, using artifact distributions, is run to perform the meta-analysis. INTNL uses an interactive formula for the simultaneous, rather than sequential, computation of true score variance (σ_p^2), which is given in Hunter and Schmidt (1990, p. 186).

Based on the results of computer simulations, interactive formulas are most accurate (Schmidt et al., 1993). The percentage of observed-score variance explained by sampling and measurement errors provides an estimate of the generalizability of the meta-analytic results to the respective population parameters.

Path analysis

The overall results of the CSP-FFP meta-analysis and the observed correlations of firm size with CSP and FFP were entered into Hunter and Hamilton's least-squares path-analysis program, first using the full path-analysis model (i.e., with all three possible links included). The complete path model (Figure 1) would specify that firm size has a direct and an indirect (over CSP) impact on FFP. The full path model is then compared to reduced models with different paths alternately dropped. All coefficients in the path model are corrected for study artifacts, namely primary-study sampling error (i.e., variations in sample sizes n , which are smaller than infinity, lead to erroneous conclusions in primary studies) and measurement errors of CSP and FFP (i.e., unreliable measures systematically attenuate path estimates in primary studies).

Results

The path analysis is based on the results reported in Table II, Orlitzky's (1998) CSP-FFP meta-analytic database, and Gooding and Wagner's (1985) meta-analysis of the relationship between organizational size and organizational financial performance. As Table II shows, the 41 studies aggregated for the size-CSP meta-analysis had a mean observed correlation of 0.06 and a corrected mean correlation (ρ) of 0.11. The considered study artifacts accounted for 32% of observed variance, suggesting that at least one other (so far unknown) variable might moderate the relationship between firm size and CSP. Further examination of the meta-analytic data set for moderators may be unproductive, however, because in general the present meta-analysis of

TABLE II
Meta-analysis of CSP-size correlations

| k^a | Total sample size | Sample-size weighted mean observed r | Observed variance | %Variance explained ^b | Corrected r (mean ρ) | Variance of corrected r | SD_ρ | 80% credibility interval | File drawer analysis ^c |
|-------|-------------------|--|-------------------|----------------------------------|------------------------------|---------------------------|-----------|--------------------------|-----------------------------------|
| 41 | 6889 | 0.0611 | 0.0197 | 31.90% | 0.1050 | 0.0388 | 0.1969 | [-0.0608; 0.2708] | 9 |

^a k : number of correlation coefficients meta-analyzed.

^b Refers to percentage of observed variance explained by 3 study artifacts: sampling error, measurement error in CSP, meas. error in FFP;

^c FDA Hunter and Schmidt's (1990) effect size file drawer analysis: Number of missing studies averaging null findings needed to bring r_{obs} down to 0.05.

firm size and CSP does not support an empirical link between the two constructs.

Effect-size file drawer analysis was performed to check the meta-analytic data sets for availability bias (Hunter and Schmidt, 1990). File drawer analysis computes the number of unlocated (i.e., "lost" or "missing") studies needed to cause a change in the empirical conclusions (cf. also last column of Table II). In most cases, it is unlikely that so many (unpublished) studies were overlooked, given the multiple ways in which studies were located. The file drawer analyses of all three meta-analyses suggest that availability bias was not a big problem for the remaining analyses.

The three meta-analyses formed the founda-

tion for the path analyses. The path p_1 between size and CSP is based on the present CSP-size findings (presented in Table II). Path p_2 (size-FFP) is based on Gooding and Wagner's (1985) mean observed correlation of 0.027 (with an observed variance of 0.0684). Finally, path p_3 between CSP and FFP is based on the meta-analysis conducted by Orlitzky (1998).

Individual-link and fit analyses suggest that organizational size has no significant paths to CSP or FFP (Figure 2). The only path that cannot be dropped in this three-variable model is from CSP to FFP (or vice versa). Furthermore, the corrected path coefficient p_3 of 0.37 between CSP and FFP (i.e., p_3 corrected for sampling error and unreliability) remained stable across all

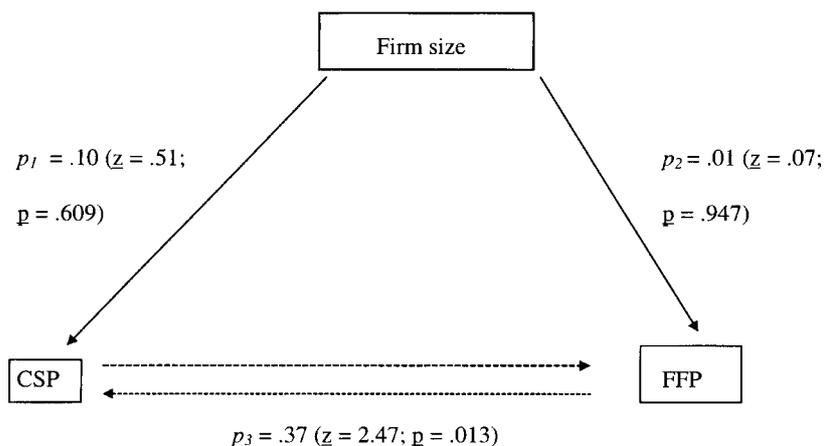


Figure 2. Empirical path-analytic findings.

possible modifications of the path model, with alternate paths (p_1 and p_2) dropped (not shown).

Moreover, the path-analytic results are supported by the analysis of the three statistical conditions that have to exist to answer the research question in the affirmative. First, across 41 studies with a total N of 6889, firm size and CSP are correlated to only a minor extent ($r_{\text{obs}} = 0.06$; $t = 0.38$; ns.). Second, CSP and FFP are significantly positively correlated ($r_{\text{obs}} = 0.18$; $t = 3.58$; significant at $\alpha = 0.0005$). Also, the *beta* coefficient between CSP and FFP, as the only two variables in the model, is statistically significant ($t = 3.515$; $p = 0.005$). And finally, the corrected path coefficient p_3 remains significant (at a probability level of $p = 0.01$) after the non-significant relationship (multiple-regression *beta* = 0.0162; $p = 0.83$) between firm size and FFP is added (and controlled for). Because of these results, based on an average total sample size of $N = 15\,241$ (average k of 166 correlations meta-analyzed), we fail to conclude that firm size confounds the relationship between CSP and FFP. This finding is reassuring in that the positive CSP-FFP relationship appears to be generalizable regardless of firm size.

Discussion

Criteria for demonstrating causality are (1) temporal order, (2) covariation, and (3) non-spuriousness. Orlitzky (1998) has addressed the first two criteria and shown empirically that high CSP is both a predictor and consequence of high FFP. Hence, Orlitzky's (1998) study provided broad meta-analytic support for Waddock and Graves' (1997) earlier finding of a virtuous circle found in their more limited sample. The present study addressed one of the most frequently mentioned variables potentially confounding the relationship between CSP and FFP, namely firm size. The empirical analysis, based on the integration of meta-analytic results of over two decades of research in a path modeling effort, demonstrated that when firm size is controlled for, the positive correlation between CSP and FFP still holds. In other words, the observed covariation between CSP and FFP is not due to

the influence of this specific third factor that has been postulated to cause both high CSP and high FFP.

Of course, the question remains whether other potential variables may make the positive relationship spurious. For example, both CSP and FFP might be the consequence of rigorous strategic planning and once quality and/or content of "strategic management" is controlled for, the positive relationship may disappear. Another set of variables which should be investigated is managerial talent, social capital, organizational learning, and organizational knowledge, which may be both a predictor of high CSP and high FFP.

Hence, providing further empirical evidence regarding causality between CSP and FFP requires this bi- and trivariate meta-analysis to be expanded to a multivariate causal modeling effort, which in turn is based on a multitude of prior empirical work. What is required in future research is not only the statistical control for sampling error, measurement error, and firm size, but also for other possibly confounding variables. Moreover, other potential moderators must be explored empirically, such as population- or industry-level effects like population density, environmental characteristics such as complexity, munificence, and dynamism, stage in the industry life-cycle, and, perhaps most important, amount of industry regulation.

Some readers may argue that a large overlap of meta-analytic data sets, especially the data sets covering paths p_1 and p_3 , may be problematic. This would ignore the fact that most path analyses published in the organization studies and psychology literature overlap 100% because the researchers only examined *one* sample in *one* primary study. Overlap in and of itself, while admittedly 68% in the CSP-size and CSP-FFP meta-analyses, is not problematic. The inclusion of firm size in a path model is an advance relative to primary studies, which cannot correct for study artifacts and, thus, often produce erroneous conclusions (e.g., Chen and Metcalf, 1980). In addition, weighting for sample size does not exacerbate the overlaps. Instead, weighting allows for a statistically correct computation and correction for sampling error. Larger samples (e.g.,

Waddock and Graves, 1997) are more meaningful than smaller samples in terms of their empirical content.

Overall, this meta-analysis is a second step toward proving causality. It builds on other studies showing covariation and temporal precedence of CSP (before FFP). These other studies may be considered a first step toward demonstrating causality. The present path analysis controls for an internal organizational factor which has been one the most frequently cited potentially confounding “suspects” in the CSP-FFP literature. The present meta- and path-analyses based on over 15 000 observations cast doubt on the arguments of CSP skeptics like Chen and Metcalf (1980), who showed in a single-sample study that firm size was the real cause of both CSP and FFP. In contrast, the present study indicates that this finding was largely due to sampling error because across samples there is neither a significantly positive correlation between firm size and CSP nor between firm size and FFP. These meta- and path-analyses showed that control for firm size in primary studies cannot be considered a *generalizable* answer to the paper’s central question. The hypothesis that large firms are more likely to engage in socially responsive activities and, at the same time, are more likely to perform well financially has failed to garner empirical support. Therefore, the failure to have firm size confound the positive relationship between CSP and FFP is reassuring, since this paper suggests that both large and small firms can benefit from CSP.

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