

SOCIAL CAPITAL IN ORGANIZATIONS: UNDERSTANDING THE LINK TO FIRM PERFORMANCE

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INTRODUCTION

Four measures of organizational culture—involvement, consistency, adaptability, and mission—are conceptualized as a form of social capital in organizations (Denison, 1990). This research links social capital to other strategic perspectives, such as RBV and intangible resources (Barney, 1991; Leana & Van Buren, 1999; Nahapiet & Ghoshal, 1998), and contributes some useful empirical evidence to a predominantly conceptual literature (Godfrey & Hill, 1995; Newbert, 2007; Wilderom, Glunk, & Masloswski, 2000). The analysis links these four measures of organizational culture to return-on-assets, sales growth, and the market-to-book ratio with a total sample of 102 data points. The results suggest that adaptability and involvement contribute the most to long-term financial performance and shorter-term sales growth.

Social Capital in Organizations

The social capital perspective seeks to explain the conditions under which “social” resources developed or acquired in one period have an impact on the strategic advantages of firms in subsequent periods. Similar assertions have been made by researchers interested in intangible resources such as reputation, human capital, and the value of corporate social responsibility. But despite the growing popularity of the resource-based view as an explanation for firm performance that counters the hegemony of industry-dynamics (Porter, 1980), empirical evidence has lagged because many intangible resources are either unobservable or extremely difficult to measure (Godfrey & Hill, 1995).

The link between social capital and a firm’s competitive position is receiving increased attention. Building on applications of social capital at the individual, group, and societal level, more recent work has considered social capital as an organizational-level resource (Leana, & Pil, 2006; Leana, & Van Buren, 1999; Nahapiet & Ghoshal, 1998). Researchers have differentiated between “internal” social capital that examines the “closure” or “bonding” that creates internal cohesiveness and “external” social capital that examines “brokerage” or “bridging” linkages to external groups (Burt, 2005; Putnam, 2000).

Researchers focusing on internal social capital have examined both the structure of the internal network and the character of the interactions within it (Adler & Kwon, 2002). In this paper, we draw upon Nahapiet & Ghoshal’s (1998) dimensions of internal social capital: structural, relational, and cognitive. The *structural* dimension of social capital describes the configuration of linkages between people within an organization; the *relational* dimension of social capital “describes the kind of personal relationships people have developed with each

other through a history of interactions” (244), and the *cognitive* dimension refers to those “resources providing shared representations, interpretations, and systems of meaning” (244). Describing the cognitive dimension, Leana and Pil (2006, 354) mention that “the shared vision and goals, and the collectively held values that underlie them, help promote integration and create a sense of shared responsibility and collective action.”

In this study we examine the impact of the *relational* and *cognitive* dimensions of social capital on the financial performance of corporations. Drawing on the obvious overlap with the organizational culture literature, we use the survey measures developed by Denison (1990) and his colleagues (Denison, Janovics, Young, & Cho, 2007). The survey measures four dimensions of culture—involvement, consistency, adaptability, and mission. The involvement dimension measures empowerment, capability development, and team-orientation (Denison, 1990). Organizations high in involvement create a sense of ownership and responsibility which leads to commitment and responsible autonomy. The second dimension, consistency, refers to the level of agreement, coordination & integration, and intensity of core values. These characteristics are hypothesized to improve performance through alignment and efficiency. The third dimension, mission, focuses on vision, strategy and goals, examining why the organization exists and where it is headed in the future. Mission provides a purpose and a reason for the importance of work and helps to define an appropriate course of action. The fourth dimension, adaptability, is the organization’s capacity to respond to customer needs, create change, and learn. Organizations scoring high in this dimension are flexible, create new and improved ways to do work, and are connected to the needs of the consumer.

METHOD

The sample of 102 data points was drawn from the archive of publically traded companies surveyed between 1997-2004. Within the sample of 102 data points, 71 were first-time surveys and the remaining 31 were repeat assessments of an organization in a different year. To ensure an adequate assessment of a firm’s culture, a company was included from the archive if there was a representative sample of over 100 respondents, or if more than .5% of all employees responded. Samples that were from subdivisions, functions, or locations were not included because they didn’t represent the company as a whole. Of the companies that met these criteria the average number of respondents per company was 1,145 with a minimum of 27 and a maximum of 15,965. The sample represents 29 different industries. The survey includes 60 questions with 15 items assessing each of the 4 dimensions. Responses on all items were measured on a 5-point Likert scale that ranged between 1 (“strongly disagree”) to 5 (“strongly agree”). The factor structure has been confirmed in a prior study (Denison, Janovics, Young, & Cho, 2007), and the Cronbach α ’s of the 15 items in the four traits ranged from .87 to .92.

To calculate ROA, sales growth, and the market-to-book ratios, all financial data were drawn from Standard & Poor’s COMPUSTAT database. For each of these measures, we also calculated a standardized Z-score that captured each company’s performance relative to its industry peers. Next, to create time-series data for the performance measures over three years, we matched the survey data for each firm with the performance data for the year in which the survey data were gathered, and for the following three years. For example, if a firm was surveyed in 2002, years 2002-2005 were included as Year 0 through Year +3. Finally, we controlled for outliers beyond the 99.9% confidence interval using established techniques (Kennedy, Lakonishok & Shaw, 1992).

RESULTS

Figure 1 displays the correlations of the four culture traits with return-on-assets and market-to-book ratios over a three-year period. This figure, as well as the statistics reported in Table 1, show several interesting patterns. First, Figure 1 shows that the correlation of adaptability with ROA and market-to-book increases over time. This suggests that the social assets that were present at Year 0 seem to have their greatest impact in the future time periods. Figure 1 shows the same pattern for involvement and the market-to-book ratio. These two findings tend to support the idea that high levels of adaptability and involvement are a form of social capital that can have an impact on future performance patterns. The findings for mission and consistency are less convincing. The correlations for mission are weaker, with only a few reaching statistical significance, and do not increase over time. The correlations for consistency are the weakest, implying that there may be relatively less future returns for corporate cultures marked only by strong consensus, clear agreement, and common perspectives.

Figure 1 about here

Figure 2 displays the correlations between the four culture traits and sales growth. In contrast to Figure 1, Figure 2 displays a significant correlation between all of the culture traits and sales growth in the short term. There is generally less evidence of the impact on sales growth in future years, but the .356 correlation between adaptability and sales growth for Year +2 is one of the strongest findings of the study. These results suggest that the social capital required to drive sustained growth is quite a bit more difficult to create than the social capital required to drive profitability and market value. Growth is much more volatile than profitability and thus quite a bit more difficult to sustain over time. Nonetheless, these results do show that all four of the culture traits can be good predictors of concurrent and short-term performance.

Figure 2 about here

Table 1 about here

DISCUSSION

There are many limitations to this study. Only a few aspects of relational and cognitive social capital have been examined. The simplified statistical results presented in this brief paper leave many questions unanswered. Even though this study has incorporated the survey responses from over 100,000 individuals, the sample of firms is still relatively small, and the quality of the survey sample within each firm can always be improved.

Nonetheless, this study has presented an empirical test of the idea that organizational culture is a form of social capital. From these results, it appears that the social and cultural resources developed or acquired in one period can have a significant impact on the performance advantage of firms in subsequent periods. Empirical evidence still lags far behind conceptual arguments regarding the impact of intangible resources on firm performance, but these results represent at least a small step forward.

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Figure 1: Correlations of the Culture Traits with ROA and Market-to-Book Ratio

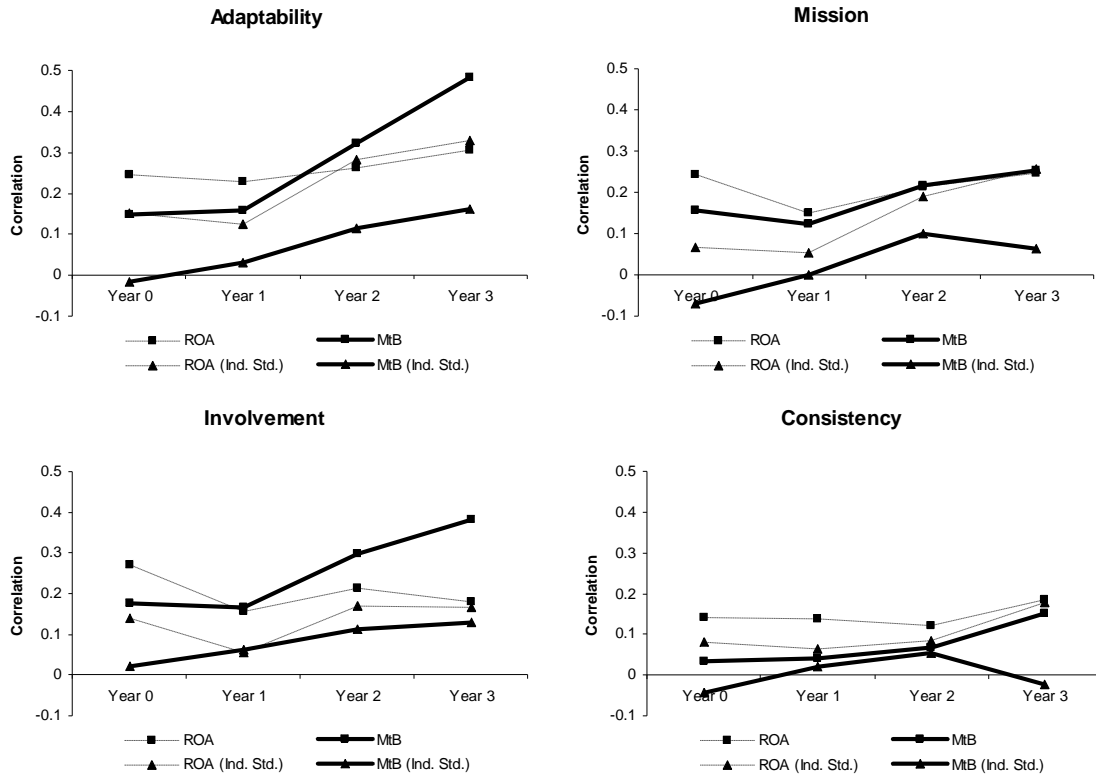


Figure 2: Correlations of the Culture Traits with Sales Growth

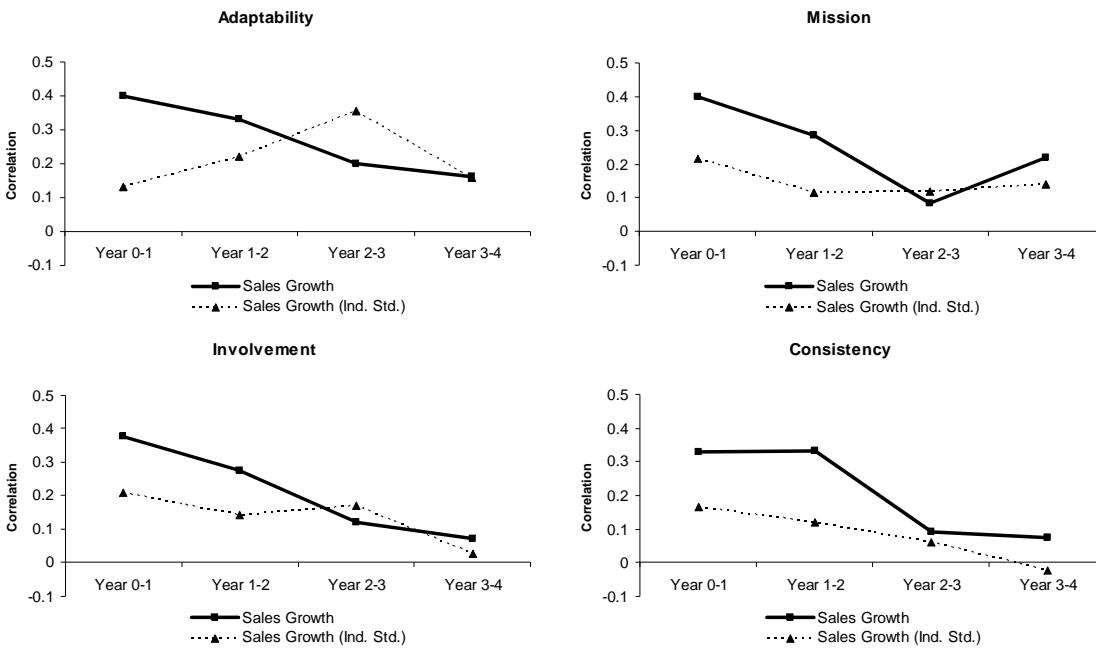


Table 1: Correlations between Culture Traits and Financial Performance from Year 0-3

	Mean (SD)	Adapt.	Mission	Involve.	Consist.
Year 0 (N~102)					
ROA (%)	.05 (.06)	.244**	.244**	.269**	.141
ROA (Ind. Std.)	.15 (.73)	.150	.067	.141	.082
Sales Growth (Year 0-1)	.09 (.14)	.399**	.399**	.376**	.330**
Sales Growth (Ind. Std.)	-.06 (.60)	.131	.216*	.208*	.166
Market-to-Book	3.85 (3.45)	.148	.157	.175*	.034
Market-to-Book (Ind. Std.)	.21 (.77)	-.016	-.070	.020	-.041
Year 1 (N~81)					
ROA (%)	.05 (.05)	.229*	.149	.156	.137
ROA (Ind. Std.)	.17 (.68)	.124	.055	.054	.063
Sales Growth (Year 1-2)	.10 (.21)	.330**	.286**	.275**	.331**
Sales Growth (Ind. Std.)	-.04 (.75)	.222*	.114	.141	.121
Market-to-Book	3.71 (3.57)	.156	.124	.165	.039
Market-to-Book (Ind. Std.)	.32 (1.15)	.031	.001	.063	.020
Year 2 (N~68)					
ROA (%)	.04 (.05)	.262*	.214*	.213*	.122
ROA (Ind. Std.)	.13 (.63)	.281*	.189	.171	.083
Sales Growth (Year 2-3)	.09 (.19)	.200	.083	.121	.092
Sales Growth (Ind. Std.)	-.20 (.68)	.356**	.117	.172	.060
Market-to-Book	3.23 (2.57)	.321**	.216*	.298**	.069
Market-to-Book (Ind. Std.)	.28 (1.32)	.116	.101	.111	.054
Year 3 (N~51)					
ROA (%)	.05 (.06)	.305*	.247*	.179	.185
ROA (Ind. Std.)	.18 (.62)	.330*	.256*	.167	.179
Sales Growth (Year 3-4)	.06 (.18)	.162	.219	.072	.073
Sales Growth (Ind. Std.)	-.14 (.84)	.159	.140	.028	-.024
Market-to-Book	3.29 (2.56)	.482**	.255*	.383**	.151
Market-to-Book (Ind. Std.)	.20 (.87)	.160	.062	.129	-.021

Note: Sample size decreases because after 2001 firms drop out of lagged financial metrics.

* $p < 0.05$ (1-tailed)

** $p < 0.01$ (1-tailed)