Do Cultural Differences Matter in Mergers and Acquisitions? A Tentative Model and Examination

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A substantive body of theory and research on the role of culture in mergers and acquisitions (M&A) suggests that cultural differences can create major obstacles to achieving integration benefits. However, the opposite view—that differences in culture between merging firms can be a source of value creation and learning—has also been advanced and empirically supported. In an attempt to reconcile these conflicting perspectives and findings, we present a model that synthesizes our current understanding of the role of culture in M&A, and we develop a set of hypotheses regarding mechanisms through which cultural differences affect M&A performance. The results of a meta-analysis of 46 studies, with a combined sample size of 10,710 M&A, suggest that cultural differences affect sociocultural integration, synergy realization, and shareholder value in different, and sometimes opposing, ways. Moderator analyses reveal that the effects of cultural differences vary depending on the degree of relatedness and the dimensions of cultural differences separating the merging firms, as well as on research design and sample characteristics. The implications for M&A research and practice are discussed.

Key words: mergers and acquisitions; postmerger integration; culture; meta-analysis

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For the past three decades, there has been a growing body of research on the variables that affect the performance of mergers and acquisitions (M&A). However, the key factors for success, and the reasons why M&A often fail, remain poorly understood. A meta-analysis of 93 published studies by King et al. (2004) found that none of the most commonly studied antecedent variables (degree of diversification of the acquirer, degree of relatedness, method of payment, acquisition experience) were significant in predicting postacquisition performance. Furthermore, this meta-analysis revealed that although the target firm’s shareholders gain significantly from M&A, there is little evidence that value is created for the shareholders of acquiring firms. Collectively, the findings of this meta-analysis imply that anticipated synergies are often not realized, and that unidentified variables explain significant variance in acquisition performance. King et al. (2004) concluded that “despite decades of research, what impacts the financial performance of firms engaging in M&A activity remains largely unexplained” (p. 198).

Although theoretical frameworks for explaining the success and failure of M&A have traditionally focused on financial and strategic factors, research into the organizational and human resources implications of M&A has increased in prominence in recent years. An emerging and growing field of inquiry has been directed at the cultural dynamics of M&A and the implications of cultural differences for the postmerger integration process (Cartwright and Schoenberg 2006). This literature has sought to explain M&A performance or underperformance in terms of the impact that variables such as cultural distance (Morosini et al. 1998), culture compatibility (Cartwright and Cooper 1996), cultural fit (Weber et al. 1996), management style similarity (Datta 1991, Larsson and Finkelstein 1999), cultural change (Kavanagh and Ashkanasy 2006), cultural convergence (Barkinshaw et al. 2000), or acculturation (Larsson and Lubatkin 2001, Nahavandi and Malekzadeh 1988) have on the integration process and the financial performance of firms engaging in M&A activity.

A key assumption underlying much of this research is the notion that cultural differences represent a source of “acquisition cultural risk” (David and Singh 1994, p. 251) and a potential obstacle to achieving integration benefits. This is consistent with the cultural distance hypothesis, which, in its most general form, suggests that the difficulties, costs, and risks associated with cross-cultural contact increase with growing cultural differences between two individuals, groups, or organizations (Hofstede 1980). Although this appears to be an intuitively plausible assumption supported by a myriad of anecdotal evidence, the growing body of empirical research on the impact of cultural differences in M&A has yielded inconclusive—and often contradictory—results. While some studies (e.g., Datta and Puia 1995) found cultural differences to be negatively associated
with M&A performance, others (e.g., Morosini et al. 1998) observed a positive relationship or found cultural differences to be unrelated to the performance of firms engaging in M&A activity. Reviews (Schoenberg 2000, Schweiger and Goulet 2000, Teerikangas and Very 2006, Stahl and Voigt 2005) have generally concluded that findings of studies are inconsistent and have called for further theoretical and empirical research directed at the cultural dynamics of M&A.

In this paper, we argue that the culture-performance relationship in M&A is likely to be more complex than suggested by the cultural distance hypothesis. We propose that the contradictory findings observed in previous research may be due to the fact that M&A researchers have compared “apples and oranges” in making conclusions about the impact of cultural differences without distinguishing between different levels of culture (national or organizational), performance measures (accounting- or stock market-based measures), and organizations studied (acquiring or target firms). Also, M&A researchers have paid relatively little attention to the process by which cultural differences affect the performance of firms engaging in M&A activity. In the following sections, we develop a set of hypotheses regarding mechanisms through which cultural differences affect M&A performance, and test them using meta-analytic techniques. While several narrative reviews of this literature exist, the meta-analytic approach on which we rely provides an integration of this body of work and may help explain the inconsistent findings obtained in previous studies. Scholars have long criticized the fragmented nature of research in this area, arguing that M&A are multifaceted phenomena that require a unified research approach that integrates concepts and ideas from various disciplines (e.g., Schweiger and Goulet 2000, Shimizu et al. 2004). By linking organizational and human resource perspectives on M&A integration to notions drawn from the strategy and finance literatures on M&A, we hope to gain a better understanding of the mechanisms through which cultural differences affect M&A performance.

**Literature Review and Research Framework**

Figure 1 presents the model guiding this study. It focuses on two M&A performance outcomes: synergy realization, as reflected in accounting-based performance improvements; and shareholder value creation, commonly measured in terms of cumulative abnormal returns. With regard to the latter, we propose two distinct processes by which cultural differences affect shareholder value in the short term and in the longer term: first, by influencing investors’ expectations about the future performance of the acquiring; second, by affecting the likelihood that actual economic benefits are generated, a process that

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**Figure 1 Hypothesized Impact of Cultural Differences on M&A Performance**

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**Notes.** Task integration process variables, such as capability transfer, resource sharing, and learning, have not been examined with sufficient frequency in previous research to be considered in this meta-analysis. Solid arrows indicate relationships tested in this study; dotted arrows indicate proposed relationships.
requires the realization of synergies. The model thus points to the critical role of the integration process in determining the success of M&A. As Schweiger (2002) has noted, except for the rare case when a target firm is acquired at a discount to its intrinsic value, the execution of a well-designed integration process that captures all forecasted synergies is critical to maximizing value creation and minimizing value destruction.

Two aspects of the integration process are proposed to be critical for synergy realization: sociocultural integration and task integration. This part of the model builds on the work of Birkinshaw et al. (2000) on M&A integration, in particular their distinction between task integration, measured in terms of transfers of capabilities and resource sharing; and human integration, which involves developing a sense of shared identity and positive attitudes toward the new organization. Consistent with Birkinshaw et al. (2000), we propose that overall effective integration is an interactive process, requiring both sociocultural and task integration efforts. However, whereas Birkinshaw et al. (2000) used the term task integration as a synonym for synergy realization, the model depicted in Figure 1 considers task integration outcomes, such as the extent of resource sharing or learning, as antecedents of synergy realization.

It is important to note that we do not claim that cultural differences are the sole or most important causal factor contributing to the success and failure of M&A. Numerous variables have been proposed to influence the financial performance of firms engaging in M&A activity (e.g., Child et al. 2001, Hitt et al. 2001, Larsson and Finkelstein 1999), cultural differences being only one of them. The usefulness of cultural differences as a factor in predicting M&A outcomes is likely to increase as the number of links in the causal chain decreases. In other words, cultural differences are likely to be more closely associated with sociocultural integration outcomes than with realized synergies or long-term value creation for the shareholders, because they have a more direct bearing on the former than on the latter.

In the sections that follow, we discuss each of the variables and their hypothesized relationships. Relationships that have been investigated with sufficient frequency in past research to permit meta-analytic testing are presented as hypotheses; relationships that were not examined often enough to allow for meta-analytic testing are presented in the form of propositions for future empirical investigation.

Impact of Cultural Differences on the Integration Process and M&A Performance

Sociocultural Integration. In this paper, we focus on aspects of sociocultural integration that seem most relevant to synergy realization, namely, the creation of positive attitudes toward the new organization and the emergence of a sense of shared identity and trust among organizational members. There is extensive evidence in the social psychological literature (e.g., Byrne 1971, Darr and Kurtzberg 2000) that people tend to be attracted to those whose attitudes and values are similar to their own. Research on interpersonal trust development has shown that shared norms, ideologies, and values facilitate the emergence of trust, while limiting the potential for conflict (Lewicki and Bunker 1995, Sitkin and Roth 1993). Conversely, trust can erode and the potential for conflict increases when a person or group is perceived as not sharing key values. As a result of perceptual biases and basic cognitive processes such as social categorization, negative characteristics and intentions are often attributed to members of the out-group (Kramer 1999). This may generate or reinforce feelings of suspicion because the members of the out-group are being evaluated “as uniformly unethical or malevolent, incompetent, and ill-informed—and the in-group is viewed in the opposite terms” (Sitkin and Stickel 1996, p. 212).

Social identity theory (Tajfel 1981, Turner 1982) suggests that organizational members show a bias towards members of their own group and tend to hold a negative view about the members of the out-group in order to enhance the relative standing of their own group. In-group bias and “us-versus-them” thinking are likely to be greatest when there is a perceived external threat, such as a takeover attempt, and when the out-group is perceived to be very different from the in-group (Elsass and Veiga 1994, Hogg and Terry 2000). In such a situation, cohesiveness among the members of the target firm is likely to increase and the takeover attempt may be fiercely resisted—a situation that Datta and Grant (1990, p. 32) termed the “conquering army syndrome.” Acquiring managers, on the other hand, may adopt an attitude of superiority and treat the members of the target firm as inferior (Hambrick and Cannella 1993, Jemison and Sitkin 1986). In cross-border M&A, feelings of hostility, resentment, and distrust may be further fueled by cultural stereotypes and xenophobia (Krug and Nigh 2001, Olie 1990). Also, because cultural differences are easy “attribute targets,” internal politics and power struggles may be seen or portrayed as being caused by cultural differences, even in circumstances where this is not the case (Vaara 2003). These arguments suggest the following hypothesis:

HYPOTHESIS 1. Differences in culture between merging firms are negatively associated with sociocultural integration outcomes.

Task Integration. While the M&A literature tends to emphasize the potential problems in the integration process caused by cultural differences, the opposite view that cultural differences can be a source of value creation and learning has also been advanced by M&A
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access to unique and potentially valuable capabilities, resources, and learning opportunities inherent in a different cultural environment. However, it seems impossible to predict ex ante whether the benefits of cultural differences in terms of increased potential for capability transfer, resource sharing, and learning will offset or exceed the impediments caused by cultural differences in the integration process. This is because the sociocultural and task integration processes interact and combine in complex ways to facilitate (or undermine) the realization of synergies. The available evidence suggests that poor sociocultural integration limits the effectiveness of task integration efforts as a driver of operational synergies. In other words, poor sociocultural integration will block successful task integration, and task integration cannot be driven faster than success with sociocultural integration (Birkinshaw et al. 2000, Haspeslagh and Jemison 1991). Also, as discussed above, the effect of cultural differences on combination potential is not linear: With growing cultural distance, the likelihood increases that the combining firms’ practices are incompatible and lead to implementation problems, thereby undermining the successful transfer of capabilities, resource sharing, and learning (Björkman et al. 2007).

Taken together, these arguments suggest that although cultural differences may enhance the potential for synergies, the impediments to sociocultural integration created by cultural differences are likely to adversely affect the realization of projected synergies. Therefore, we advance the following hypothesis:

**Hypothesis 2. Differences in culture between merging firms are negatively associated with synergy realization.**

**Impact of Cultural Differences on Shareholder Value Creation**

The model depicted in Figure 1 suggests two distinct processes by which cultural differences may affect shareholder value in acquiring firms: first, by influencing investors’ expectations about the future performance of the firm; and second, by affecting the likelihood that actual economic benefits are generated. These dual processes reflect the distinction between value capture and value creation. According to Jemison (1988), value capture is a onetime event resulting from the M&A transaction itself. In contrast, value creation is a long-term process that requires the realization of operational synergies.

**Announcement Returns.** The capital market perspective on the role of culture in M&A suggests that perceptions of cultural differences affect shareholder value by influencing expectations of investors about the future performance of the acquiring firm (Chatterjee et al. 1992). This prediction is based on the central tenet of financial economics that the stock market incorporates all available information into its expectation of future firm earnings and into the current share price. While the validity of this premise has been challenged (Barney 1988, Harrison et al. 1991), there is evidence to suggest that not only do investors evaluate M&A based on financial and strategic fit considerations, but they may also factor in the organizational and human resources implications when estimating future consolidation costs and the financial impact of a merger (e.g., Chatterjee et al. 1992, Lubatkin 1987). For example, Chatterjee et al. (1992) suggested that with the continual flow of anecdotal evidence from the popular press about the adverse effects of culture clashes in M&A, analysts may consider the cultural fit between merging firms in the valuation of a merger. Consistent with this idea, they found that differences in management styles between the combining top management teams were negatively associated with stock market gains. Extending this argument to cross-border M&A, Datta and Puia (1995) suggested that the existence of significant cultural differences may be perceived by investors as a factor in increasing postacquisition administrative and consolidation costs. Moreover, they argued that cultural distance may result in an inadequate understanding of the foreign market and may cause an acquirer to overpay for the target. Cultural differences may thus adversely affect the acquiring firm’s market value.

**Hypothesis 3A. Cultural differences are negatively associated with acquisition announcement returns for the acquiring firm’s shareholders.**

**Long-Term Shareholder Value.** Acquisition announcement returns represent investors’ expectations of takeover benefits and do not capture whether M&A generate actual economic benefits and create value for the shareholders in the longer term (Healy et al. 1992). To date, few studies have investigated the long-term performance of acquiring firms, and even fewer have combined an event study approach with an outcome-oriented approach. Hence, little is known about the causal linkage between realized synergies and shareholder value. However, despite the “inability of stock performance studies to determine whether takeovers create real economic gains and to identify the sources of such gains” (Healy et al. 1992, p. 135), it seems reasonable to assume that the synergies realized as a result of the value-creating activities of the merged firms translate into longer-term wealth creation for the shareholders. As additional information about the M&A and its success or failure becomes known, it is assimilated by the market (Datta et al. 1992). To the extent that cultural differences have an impact on the realization of projected synergies, the acquiring firm’s market value should be affected. Of course, synergistic benefits will translate into shareholder wealth only if they are viewed by investors to be
in excess of the price paid for the acquired company—that is, if the acquirer does not overpay for the target firm (Datta and Puia 1995, Schweiger 2002).

The foregoing discussion suggests the following hypothesis:

**Hypothesis 3B. Cultural differences are negatively associated with postacquisition stock returns for the acquiring firm’s shareholders.**

**Moderators of the Relationship Between Cultural Differences and M&A Outcomes**

The effects of cultural differences in M&A cannot be understood in isolation from characteristics of the acquirer-target relationship and the wider integration process. Next, we consider two potential moderators: the dimension of cultural differences separating the two firms, and the degree of relatedness.

**Dimension of Cultural Differences.** It has been argued that organizational culture and national culture are separate constructs, with different attitudinal and behavioral correlates and, possibly, different implications for the postmerger integration process (David and Singh 1994, Weber et al. 1996). Based on the premise that national culture represents a deeper layer of consciousness and is more resistant to change than is organizational culture (Schneider and Barsoux 2003), it may be predicted that cultural differences at the national level create relatively greater barriers to successful integration than do organizational cultural differences. This is consistent with the observation that cross-border M&A appear to be particularly difficult to implement because they require “double-layered” acculturation (Barkema et al. 1996, p. 151), whereby cultural differences at both the national and organizational levels have to be bridged. However, research by Weber et al. (1996) challenged the prevailing wisdom that the cultural challenges encountered in cross-border M&A are greater than those inherent in domestic M&A. They found that in domestic M&A, differences in organizational culture were negatively associated with employee commitment, attitudes toward the merger, and cooperation. In cross-border M&A, an inverse relationship between cultural differences and these attitudinal and behavioral outcomes was observed. A similar pattern emerged from a case survey conducted by Larsson and Risberg (1998).

Other studies also suggest that some of the problems associated with sociocultural integration may be amplified in domestic, rather than cross-border, settings. For example, Very et al. (1996) found that national cultural differences elicited perceptions of attraction rather than stress, depending on the nationalities of the buying and acquired firms. Goulet and Schweiger (2006), in summarizing the existing evidence, argued that “M&A partners are more accepting of and more attentive to national cultural distance, and therefore are predisposed to working toward developing shared understandings involving these cultural differences” (p. 421). Consistent with this idea, Evans et al. (2002) observed that managers involved in cross-border M&A tend to pay greater attention to the less tangible but critical cultural issues that are often overlooked in domestic M&A. Therefore,

**Hypothesis 4A. Differences in national culture between merging firms are less negatively associated with sociocultural integration outcomes than organizational cultural differences.**

As previously discussed, cultural differences may enhance a firm’s competitive advantage by providing access to unique and potentially valuable capabilities and resources. However, not all types of cultural differences are equally valuable. The cultural differences inherent in cross-border M&A are likely to be associated with higher levels of capability complementarity and greater learning opportunities than those inherent in domestic M&A. Morosini et al. (1998, p. 141) argued that “acquisitions in culturally distant countries tend to be more valuable, because a greater national cultural distance makes it more likely that the target will provide a set of routines and repertoires that are significantly different... and which cannot be easily replicated.” Thus, complementarities are more likely to exist. Consistent with this logic, it has been argued that acquisitions in unfamiliar cultures can enhance the development of technological skills, trigger new solutions, and foster innovation, because firms operating in different cultures and markets are exposed to a wider variety of ideas, practices, and routines (Barkema and Vermeulen 1998, Larsson and Finkelstein 1999, Olie and Verwaal 2004). Collectively, these arguments suggest that the cultural differences inherent in cross-border M&A can be a source of value creation and learning.

**Hypothesis 4B. Differences in national culture between merging firms are less negatively associated with synergy realization than are organizational cultural differences.**

Although speculative, it is plausible to assume that the negative shareholder wealth effects of cultural differences (Chatterjee et al. 1992, Eddy and Seifert 1984) may be less pronounced for cross-border M&A than for domestic M&A. The literature on cross-border M&A identifies a number of benefits for acquiring firms associated with such transactions: economies of scale, exploitation of foreign market opportunities, availability of scarce specialized resources, and so on (Datta and Puia 1995). As a result of these perceived advantages, analysts may attribute greater synergy potential to cross-border M&A, while giving relatively little weight to “soft factors” such as lack of cultural fit. This might be rational, given that cross-border acquisitions allow companies to exploit foreign market opportunities more
quickly than other entry strategies, and that acquisitions are sometimes less risky than greenfield investments (Datta and Puia 1995, Vermeulen and Barkema 2001), even if potential integration problems and higher consolidation costs due to cultural distance are taken into account. Therefore, we predict,

**Hypothesis 4C. Differences in national culture between merging firms are less negatively associated with shareholder value than are organizational cultural differences.**

**Firm Relatedness.** M&A can be part of a strategy of related diversification in which the acquired business is expected to provide new resources, product lines, and managerial expertise, or foster growth through unrelated diversification with no intention of achieving synergies (Haspeslagh and Jemison 1991, Lubatkin 1987). The degree of relatedness is a potential moderator of the relationship between cultural differences and M&A outcomes because of its impact on the level of integration. Postmerger integration levels can range from total autonomy to total absorption, depending on the strategic intent and the kind of synergies sought. While there are few cases when an acquired firm is either entirely absorbed or left completely autonomous, M&A researchers (e.g., Buono and Bowditch 1989, Datta 1991, Larsson and Finkelstein 1999, Schweiger 2002) seem to agree that related M&A generally require higher levels of operational integration and lead to greater organizational changes and more extensive interaction among the employees of the two firms—and thus enhance the potential for cross-cultural conflict. As noted by Shenkar (2001, pp. 527–528), “how different one culture is from another has little meaning until those cultures are brought into contact with one another.” Conversely, in M&A that require lower levels of integration, acquired units are often granted a considerable degree of autonomy and there is less extensive interaction among the members of the two firms, which reduces postacquisition stress and the likelihood of culture-related problems (David and Singh 1994, Slagen 2006). Therefore,

**Hypothesis 5A. Cultural differences are more negatively associated with sociocultural integration outcomes when the degree of relatedness is high than when it is low.**

However, several caveats should be noted. First, no simple relationship exists between degree of relatedness and integration design. Horizontal acquisitions, for example, may be closely integrated, but they may also be managed at arm’s length (Haspeslagh and Jemison 1991). Second, because the level of integration may differ for various business units (Schweiger and Goulet 2000), it would be more precise to study the impact of the integration design at the level of business units rather than at the level of the firm. Third, research on relatedness and M&A performance has yielded mixed results (Lien and Klein 2006, Lubatkin 1983). From a cultural and human resources perspective, it is unclear whether the benefits of relatedness in terms of greater synergy potential offset the costs and risks associated with a more “hands-on” integration approach generally required in related M&A. Realizing synergies entails considerably higher interaction and coordination costs, and the associated cultural and human resources problems may increase the risk of failed implementation (Goulet and Schweiger 2006, Slagen 2006, Weber 1996). This is highlighted by findings of a case survey by Larsson and Finkelstein (1999), which suggest that a high level of integration may cause employees to more actively resist the changes, thereby undermining the realization of synergies. The risk of failed implementation is even greater when there is a large cultural gap, because cultural differences exacerbate the potential for conflict in the postmerger integration period.

**Hypothesis 5B. Cultural differences are more negatively associated with synergy realization when the degree of relatedness is high than when it is low.**

As previously discussed, cultural differences may adversely affect shareholder wealth by influencing investors’ expectations about the future performance of the firm. We propose that this effect is moderated by the degree of relatedness. Based on the assumption that cultural differences will be less of a problem when the acquiring firm tolerates cultural diversity and allows the target firm to retain its own culture and organizational practices, Chatterjee et al. (1992) hypothesized that the relationship between cultural fit and shareholder value is moderated by the degree of cultural tolerance exhibited by the acquirer. As predicted, they found that the more an acquiring firm’s top management team tolerated cultural diversity, the higher was the market’s earnings expectations. In related M&A, the acquirer is less likely to exhibit cultural tolerance (Nahavandi and Malekzadeh 1988, Schweiger 2002), but rather tends to impose its culture and practices on the acquired company. Changes resulting in autonomy removal often lead to conflict and dysfunctional employee behavior, such as decreased productivity, high rates of absenteeism and turnover, and—in extreme cases—failed implementation (Buono and Bowditch 1989, Datta and Grant 1990, Hambbrick and Cannella 1993). These arguments suggest that degree of relatedness may moderate the relationship between cultural differences and expectations of future firm earnings.

**Hypothesis 5C. Cultural differences are more negatively associated with shareholder value when the degree of relatedness is high than when it is low.**
**Method**

**Sample**

Because meta-analysis involves aggregation of effect sizes across studies, only studies that provided the statistical information required to calculate an effect size for the relationship between cultural differences and one or more outcome variables were included. Qualitative studies were excluded. The literature search involved manual and computerized searches of relevant published and unpublished studies. In an attempt to minimize the "file drawer problem" (Rosenthal 1984), M&A researchers were contacted and copies of potentially relevant unpublished papers were requested. A total of 56 studies were identified through this search process. In cases where two or more studies used the same sample (e.g., Larsson and Finkelstein 1999, Larsson and Risberg 1998), the study that provided more detailed statistical information was included. In cases where no effect sizes could be calculated due to missing information, an e-mail was sent to the author with a request for additional information. The statistical information necessary to calculate effect sizes could be obtained in all but one study (Van der Vennet 1996).

The final sample consisted of 46 studies with a combined sample size of 10,710 M&A. This number includes studies that were published in the same research paper but used different samples (e.g., Weber et al. 1996), as well as studies that examined multiple types of outcome measures (e.g., Zollo 2002), as explained below.

**Measures**

The studies selected for this meta-analysis examined the impact of cultural differences on three dependent variables: sociocultural integration outcomes, synergy realization, and shareholder value.

*Sociocultural Integration Outcomes.* Sociocultural integration, defined as the combination of groups of people with a shared identity, compatible values, and positive attitudes toward the new organization (Birkinshaw et al. 2000, Stahl and Voigt 2005), is an important aspect of M&A success from an organizational and human resources perspective. Sociocultural integration success or failure has been operationalized and measured in terms of employee commitment and attitudes (e.g., Weber et al. 1996), resistance (e.g., Larsson and Finkelstein 1999), turnover (e.g., Schoenberg 2004), acculturation (e.g., Larsson and Lubatkin 2001), acculturative stress (e.g., Very et al. 1996), cooperation (e.g., Weber et al. 1996), and trust (e.g., Stahl et al. 2004). These variables capture different aspects of the construct, but have been found to be highly interrelated (Stahl et al. 2004, Weber et al. 1996).

*Synergy Realization.* Because few studies have directly measured synergy realization, e.g., in terms of transfers of capabilities or resource sharing, we used accounting performance measures such as sales growth or the rate of increase in return on assets (ROA) as a proxy. The use of accounting-based measures as a proxy for synergy realization is widely considered appropriate (e.g., Morosini et al. 1998, Weber 1996), because "[t]he realization of synergies should be reflected in long-term accounting-based performance improvements" (Harrison et al. 1991, p. 181). Although there are limitations to accounting-based measures (Kim 1998), and ROA can be confounded by the method of accounting for an acquisition (Markides and Williamson 1994), accounting measures of postacquisition performance are often preferred to stock market based measures, because they represent actual economic benefits generated by M&A rather than by market expectations. Some studies (e.g., Datta et al. 1991, Zollo 2002) used a performance index, consisting of a mix of different accounting measures. Kim (1998) showed that different types of accounting measures are highly correlated and lead to the same conclusions in postacquisition performance research, thus providing some justification for combining them.

*Shareholder Value.* Event studies are commonly conducted to measure cumulative abnormal returns (CARS) a short time after the announcement of the M&A (King et al. 2004). The abnormal return is calculated as the difference between the actual stock return and the return that would be expected given the performance of the market. This methodology is based on the assumption that the capital market forms unbiased expectations of the potential for value creation (Datta et al. 1992, Lubatkin 1987). Abnormal returns might also capture long-term performance because changes in stock price around the announcement reflect a change in the expectation of future earnings. The studies included in the meta-analysis used a variety of event windows. The twoday window (−1, 0) is commonly used to identify the immediate market reaction, but broader windows around the announcement date have also been used to examine the market reaction over a longer period. Some studies have calculated the abnormal returns after 180 days or one year, based on the assumption that CARS provide a more realistic picture of wealth effects in M&A when measured a significant time after the announcement. In this study, we used event windows ending 1 to 30 days after the announcement date (e.g., −10, 10) to study the short-term effects and event periods beginning 120 days after the announcement to study the longer-term effects on shareholder value.

*Cultural Differences.* For a study to be included, cultural differences had to be assessed at the organizational level, at the national level, or at both levels. Studies focusing on organizational cultural differences commonly use a measure of top management team compatibility (e.g., Chatterjee et al. 1992, Datta et al. 1991) or examine overall cultural differences between the two
organizations (e.g., Ellis and Lamont 2004). Cultural differences at the national level are commonly measured using the Kogut and Singh (1988) index, which is a composite measure of Hofstede’s (1980) dimensions of national cultures. Some studies used self-developed scales to measure national cultural differences (e.g., Van Oudenhoven and Van der Zwee 2002) or measured cultural differences indirectly, using a measure of domestic versus cross-border M&A as a proxy for national cultural distance (e.g., Larsson and Risberg 1998).

**Moderators.** The most common method to assess degree of relatedness relies on SIC codes, based on the industry similarity of the acquiring and target firms. To test the hypothesized moderating effect of relatedness, the proportion of related to unrelated M&A was recorded for each study sample and a median split was performed. Because unrelated M&A are underrepresented in the studies included, the categorical variable created by the median split method essentially contrasts samples of related M&A with samples of M&A that received low to moderate relatedness scores, or with mixed samples. The moderator variable dimension of cultural differences (national, organizational) is confounded with the distinction between domestic and cross-border M&A. Although in principle studies of cross-border M&A permit calculation of effect sizes for the relationships between performance and both national and organizational cultural differences, the vast majority of studies assessed cultural differences at the national level only. Studies of domestic M&A only allow for assessment of cultural differences at the organizational level.

**Controls.** M&A performance may be affected by variables other than cultural differences and the moderator variables. Thus, we control for variables that previous research has shown to be related to M&A outcomes, as well as for research design and sample characteristics. To control for relative size, a categorical variable (small/large) was created, based on a median split of firm-size data. To control for time of measurement, categorical variables were created for sociocultural integration outcomes (<2 years/≥2 years after announcement); synergy realization (<2 years/≥2 years after announcement); and shareholder value (event windows ending 1 to 30 days/beginning 120 days after announcement). Research design and sample characteristics include focal organization (acquirer/ target); data collection method (survey/others); operationalization of dependent variable (e.g., CARs/others); objectivity of measures (objective/self-reported); and publication status (unpublished/published).

**Coding and Inter-rater Agreement**
Statistical data and relevant information on the variables of interest were extracted from the articles and coded by two independent raters (the second author and a postgraduate student who was unaware of the hypotheses). The interrater reliability coefficient used was Cohen’s kappa, a coefficient that is widely considered to be a suitable measure for categorical variables, and a more conservative measure than percentage agreement (Orwin 1994). The interrater reliability coefficients for the variables included in the meta-analysis ranged from 0.82 to 0.98, which suggests that the coding process produced reliable data. Disagreements between raters were discussed until consensus was reached.

**Meta-Analytical Procedure**

**Control for Artifacts and Calculation of Mean Effect Sizes.** To rule out bias due to uneven sampling, point-biserial correlation coefficients were corrected for the attenuation effect of unequal sampling (Hunter and Schmidt 1990). Studies that relied on self-report measures were corrected for unreliability (Lipsey and Wilson 2001). Because research on the psychometric properties of Hofstede’s scales revealed poor internal consistencies (Spector et al. 2001), studies relying on the Hofstede scales or the Kogut and Singh (1988) index were corrected, using the scale reliabilities reported by Hofstede (2002). Undesirable statistical properties of the product-moment correlation coefficient were controlled by applying Fisher’s Z transformation (Hedges and Olkin 1985). Finally, each effect size was weighted by the inverse of its squared standard error value following a fixed-effects model when calculating mean effect sizes (Lipsey and Wilson 2001).

**Treatment of Multiple Effect Sizes.** Because multiple effect sizes from the same study are statistically dependent, effect sizes were averaged when a study provided multiple indicators of the same outcome measure (e.g., different accounting measures). When a study used different types of outcome measures (e.g., accounting and stock market measures), the effect sizes were included in separate meta-analyses.

**Homogeneity Testing and Moderator Analysis.** If homogeneity of the effect-size distribution could not be established after pooling effect sizes, further analyses were undertaken to determine the presence of moderators. Homogeneity testing was done in two ways. First, the homogeneity Q statistic was computed to test the overall variability of study-level effect sizes (Hedges and Olkin 1985). Second, the observed effect size variability was divided into the portion attributable to subject-level sampling error and the portion attributable to other between-study differences. Exploration of moderators is indicated when the sampling error accounts for less than 75% of the observed variability (Hunter and Schmidt 1990). Moderator analysis entails conducting separate
Table 1 Mean Correlations of Main Variables Included in the Meta-Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cultural differences</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Sociocultural integration</td>
<td>$-0.21^{***}$</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(k = 15; N = 1,316)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Synergy realization</td>
<td>0.00</td>
<td>0.19***</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(k = 15; N = 1,692)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Shareholder value</td>
<td>$-0.03^{**}$</td>
<td>/</td>
<td>0.21***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>(k = 16; N = 7,702)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Firm relatedness</td>
<td>0.00</td>
<td>-0.05</td>
<td>0.14***</td>
<td>0.05***</td>
<td>1.00</td>
</tr>
<tr>
<td>(k = 8; N = 1,202)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. k = number of samples; N = total sample size (number of M&A); / = relationship not addressed by empirical studies. *p < 0.05; **p < 0.01; ***p < 0.001.

meta-analyses for two categories of the moderator variable and comparing the mean effect sizes between subgroups. A critical ratio test is performed to determine if the population rs are significantly different, as indicated by the Z statistic (Hunter and Schmidt 1990). For the subgroup analysis, we have adopted the convention that to be included in the analysis, a given variable would have to be included in a minimum of three samples (Dalton et al. 2003).

Results

Correlation Matrix

Table 1 presents the uncorrected and unweighted mean correlations between the main variables examined in this study. The correlations are generally low, but often statistically significant because of the relatively large sample sizes on which they are based. For example, 15 studies addressed the relationship between cultural differences and sociocultural integration, with a combined sample size of 1,316 M&A. The resulting mean correlation of $r = -0.21$ is statistically significant, which suggests that cultural differences are negatively associated with sociocultural integration outcomes. Table 1 contains an empty cell, because no study addressed the relationship between shareholder value and sociocultural integration.

To test the hypotheses, we employed meta-analytic techniques to correct effect sizes for small-sample bias when estimating the population effect sizes.

Hypotheses Tests

Hypothesis 1 states that differences in culture between merging firms are negatively associated with sociocultural integration outcomes. As indicated by Table 2, the meta-analysis of studies that examined the relationship between cultural differences and sociocultural integration outcomes yielded a negative mean effect size of $r = -0.09$. This effect size is substantially smaller than the uncorrected and unweighted mean correlation (see Table 1), but it is statistically significant. Thus, Hypothesis 1 is supported.

The meta-analysis of studies that investigated the relationship between cultural differences and synergy realization included data from 15 studies, with a combined sample size of 1,692 M&A. A mean effect size close to zero emerged from this analysis, which suggests that to the extent that integration benefits are reflected in accounting-based measures of postacquisition performance, cultural differences do not affect synergy realization. Thus, Hypothesis 2 is not supported.

The model developed in this study suggests two distinct mechanisms by which cultural differences affect shareholder value at different points in time. Hypothesis 3A predicts that cultural differences are negatively associated with acquisition announcement returns. To test this hypothesis, we meta-analyzed data from studies that used event windows ending 1 to 30 days after the announcement date. The mean effect size obtained in this meta-analysis was not in the predicted direction. Thus, Hypothesis 3A is not supported. To test Hypothesis 3B about possible longer-term wealth effects of cultural differences, we analyzed effect sizes obtained from studies that used event windows beginning 120 days after the acquisition announcement date. The resulting mean effect size of $-0.05$ is statistically significant, but is too small to be theoretically or practically meaningful (Cohen 1977).

Based on the literature review, the theoretical rationale for the hypothesized relationship between cultural differences and shareholder value does not apply equally to acquiring firms and target firms. Rather, the rationale is derived mainly from studies that investigated how cultural differences affect stock returns for the acquiring firm’s shareholders. Therefore, we examined whether the mean effect sizes vary depending on whether the focal organization studied was an acquiring firm or a target firm. As indicated by Table 2, a statistically significant mean effect size of $-0.26$ was obtained for the relationship between cultural differences and stock returns for the acquiring firm’s shareholders. Interestingly, an
The inverse relationship was found between cultural differences and stock returns for the target firm’s shareholders.

Table 2 indicates that the effect sizes derived from the primary research studies ranged widely (e.g., from -0.74 to 0.23 in the meta-analysis of sociocultural integration outcomes), which suggests the presence of moderators. Exploration of moderators is indicated when the homogeneity $Q$ statistic is significant, or the sampling error accounts for less than 75% of the observed variability (Hedges and Olkin 1985, Hunter and Schmidt 1990). Both criteria were met in all meta-analyses.

Therefore, we conducted a series of subgroup analyses to identify moderators. The results are presented in Table 3.

Hypotheses 4A–4C suggest that the effects of cultural differences on M&A outcomes vary depending on the dimension of cultural differences. Specifically, we hypothesized that differences in national culture will be less negatively associated with sociocultural integration outcomes, synergy realization, and shareholder value than are organizational cultural differences. With regard to sociocultural integration, the results of the subgroup analysis indicate that differences in organizational

<table>
<thead>
<tr>
<th>Outcome measure</th>
<th>$k$</th>
<th>$N$</th>
<th>Mean ES</th>
<th>-95% CI</th>
<th>+95% CI</th>
<th>Range of effect sizes</th>
<th>$Q$</th>
<th>Variance explained by S.E. (%)</th>
<th>Moderation indicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect across all outcome measures$^a$</td>
<td>36</td>
<td>9,818</td>
<td>-0.02</td>
<td>-0.04</td>
<td>0.00</td>
<td>-0.73, 0.42</td>
<td>382.74$^{***}$</td>
<td>9.41</td>
<td>Yes</td>
</tr>
<tr>
<td>Sociocultural integration</td>
<td>15</td>
<td>1,316</td>
<td>-0.09$^{**}$</td>
<td>-0.15</td>
<td>-0.04</td>
<td>-0.74, 0.23</td>
<td>43.59$^{***}$</td>
<td>35.00</td>
<td>Yes</td>
</tr>
<tr>
<td>Synergy realization</td>
<td>15</td>
<td>1,692</td>
<td>0.01</td>
<td>-0.03</td>
<td>0.06</td>
<td>-0.38, 0.42</td>
<td>86.77$^{***}$</td>
<td>16.71</td>
<td>Yes</td>
</tr>
<tr>
<td>Shareholder value</td>
<td>16</td>
<td>7,702</td>
<td>-0.01</td>
<td>-0.04</td>
<td>0.01</td>
<td>-0.62, 0.22</td>
<td>285.05$^{***}$</td>
<td>5.50</td>
<td>Yes</td>
</tr>
<tr>
<td>—Announcement effects$^b$</td>
<td>9</td>
<td>2,418</td>
<td>0.08$^*$</td>
<td>0.04</td>
<td>0.12</td>
<td>-0.62, 0.20</td>
<td>40.92$^{***}$</td>
<td>21.86</td>
<td>Yes</td>
</tr>
<tr>
<td>—Longer-term effects$^c$</td>
<td>7</td>
<td>5,693</td>
<td>-0.05$^*$</td>
<td>-0.08</td>
<td>-0.02</td>
<td>-0.40, 0.22</td>
<td>214.94$^{***}$</td>
<td>3.27</td>
<td>Yes</td>
</tr>
<tr>
<td>—Target firms</td>
<td>6</td>
<td>5,490</td>
<td>0.07$^{**}$</td>
<td>0.05</td>
<td>0.10</td>
<td>-0.03, 0.20</td>
<td>19.32$^{**}$</td>
<td>31.02</td>
<td>Yes</td>
</tr>
<tr>
<td>—Acquiring firms</td>
<td>6</td>
<td>2,041</td>
<td>-0.26$^{***}$</td>
<td>-0.30</td>
<td>-0.21</td>
<td>-0.62, 0.19</td>
<td>102.07$^{***}$</td>
<td>19.99</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Notes: $k$ = number of samples; $N$ = total sample size (number of M&A). Mean ES = weighted mean effect size; -95%CI = lower bound of 95% confidence interval; +95%CI = upper bound of 95% confidence interval; $Q$ = value of chi-square distributed homogeneity statistic. Variance explained by S.E. = percentage of observed variance explained by sampling error.

$^a$The number of samples on which the mean effect size is based is smaller than the overall sample size because effect sizes obtained from the same study were averaged to avoid the problem of statistical dependence.

$^b$Event windows ending 1 to 30 days after the announcement date.

$^c$Event windows beginning 120 days after announcement.

$p < 0.05; ^{**}p < 0.01; ^{***}p < 0.001.$

---

<table>
<thead>
<tr>
<th>Outcome measure</th>
<th>Subgroups</th>
<th>$Z$</th>
<th>$k$</th>
<th>$N$</th>
<th>Mean ES</th>
<th>-95% CI</th>
<th>+95% CI</th>
<th>Range of effect sizes</th>
<th>$Q$</th>
<th>Variance explained by S.E. (%)</th>
<th>Moderation indicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension of cultural differences</td>
<td>National</td>
<td>2.00$^*$</td>
<td>8</td>
<td>807</td>
<td>-0.06$^*$</td>
<td>-0.13</td>
<td>0.01</td>
<td>-0.55, 0.26</td>
<td>16.02$^*$</td>
<td>50.72</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Organizational</td>
<td></td>
<td>10</td>
<td>587</td>
<td>-0.14$^{**}$</td>
<td>-0.22</td>
<td>-0.06</td>
<td>-0.84, 0.23</td>
<td>40.79$^{***}$</td>
<td>23.57</td>
<td>Yes</td>
</tr>
<tr>
<td>Synergy realization</td>
<td>National</td>
<td>1.75$^*$</td>
<td>8</td>
<td>898</td>
<td>0.05</td>
<td>-0.02</td>
<td>0.12</td>
<td>-0.21, 0.42</td>
<td>22.85$^{***}$</td>
<td>35.03</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Organizational</td>
<td></td>
<td>8</td>
<td>855</td>
<td>-0.02</td>
<td>-0.09</td>
<td>0.05</td>
<td>-0.38, 0.39</td>
<td>63.52$^{***}$</td>
<td>12.66</td>
<td>Yes</td>
</tr>
<tr>
<td>Shareholder value</td>
<td>National</td>
<td>0.71</td>
<td>13</td>
<td>7,501</td>
<td>-0.02</td>
<td>-0.04</td>
<td>0.01</td>
<td>-0.40, 0.20</td>
<td>277.74$^{***}$</td>
<td>4.68</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Organizational</td>
<td></td>
<td>3</td>
<td>201</td>
<td>0.03</td>
<td>-0.11</td>
<td>0.17</td>
<td>-0.62, 0.22</td>
<td>14.90$^{***}$</td>
<td>19.55</td>
<td>Yes</td>
</tr>
<tr>
<td>Degree of relatedness</td>
<td>Low-moderate</td>
<td>2.24$^*$</td>
<td>9</td>
<td>994</td>
<td>-0.06$^*$</td>
<td>-0.12</td>
<td>0.01</td>
<td>-0.74, 0.23</td>
<td>27.68$^{***}$</td>
<td>32.81</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td></td>
<td>4</td>
<td>306</td>
<td>-0.21$^{***}$</td>
<td>-0.32</td>
<td>-0.09</td>
<td>-0.42, 0.09</td>
<td>9.11$^{*}$</td>
<td>48.02</td>
<td>Yes</td>
</tr>
<tr>
<td>Synergy realization</td>
<td>Low-moderate</td>
<td>3.28$^{***}$</td>
<td>3</td>
<td>328</td>
<td>0.16$^{**}$</td>
<td>0.05</td>
<td>0.27</td>
<td>-0.21, 0.42</td>
<td>28.18$^{***}$</td>
<td>10.10</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td></td>
<td>6</td>
<td>805</td>
<td>-0.06$^*$</td>
<td>-0.13</td>
<td>0.01</td>
<td>-0.38, 0.21</td>
<td>31.56$^{**}$</td>
<td>19.15</td>
<td>Yes</td>
</tr>
<tr>
<td>Shareholder value</td>
<td>Low-moderate</td>
<td>0.24</td>
<td>5</td>
<td>4,530</td>
<td>0.05$^{**}$</td>
<td>0.02</td>
<td>0.08</td>
<td>-0.24, 0.20</td>
<td>15.00$^{**}$</td>
<td>33.39</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td></td>
<td>6</td>
<td>731</td>
<td>0.06</td>
<td>-0.01</td>
<td>0.13</td>
<td>-0.62, 0.20</td>
<td>15.54$^{**}$</td>
<td>38.33</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Notes: $Z = Z$ value of critical ratio test for the comparison of subgroups; $k$ = number of samples; $N$ = total sample size (number of M&A); Mean ES = weighted mean effect size; -95%CI = lower bound of the 95% confidence interval; +95%CI = upper bound of the 95% confidence interval; $Q$ = value of chi-square distributed homogeneity statistic. Variance explained by S.E. = percentage of observed variance explained by sampling error.

$p < 0.10; ^{*}p < 0.05; ^{**}p < 0.01; ^{***}p < 0.001.$

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culture are more negatively associated with sociocultural integration outcomes than are differences in national culture. Thus, Hypothesis 4A is supported. The results of the subgroup analysis of accounting-based performance measures suggest that differences in national culture are positively associated with synergy realization, while differences in organizational culture are unrelated to accounting-based performance measures. The difference in mean effect sizes is small but significant, thus providing some support for Hypothesis 4B. With regard to shareholder value, we found no evidence of a moderating effect of dimension of cultural differences.

Hypotheses 5A–5C suggest that the relationship between cultural differences and M&A outcomes is moderated by the degree of relatedness. Specifically, we hypothesized that cultural differences will be more negatively associated with sociocultural integration, synergy realization, and shareholder value when the degree of relatedness is high than when it is low. As expected, the findings suggest that cultural differences are more strongly and negatively associated with sociocultural integration outcomes when the degree of relatedness is high. With respect to synergy realization, the subgroup analysis suggests that cultural differences tend to be positively associated with accounting-based measures when the degree of relatedness is low to moderate, and negatively associated when it is high. Thus, Hypotheses 5A and 5B are supported. No evidence of a moderating effect of relatedness on stock market-based measures emerged.

Impact of Research Design and Sample Characteristics
As indicated by Table 2, whether the focal organization studied was an acquiring firm or a target firm had a significant influence on the results of studies that used stock market-based measures ($Z = 14.76, p < 0.001$). Furthermore, subgroup analyses suggest that the time of measurement of stock market returns affected the meta-analytic results. Acquisition announcement returns were positively associated with cultural differences, whereas a negative effect was found in studies that measured stock market returns 120 days or later after the announcement date ($Z = 5.81, p < 0.001$). No other research design or sample characteristics had a significant influence on the results.2

Discussion
We set out to answer a question that remains largely unresolved, despite having received considerable research attention in recent years: Do cultural differences matter in M&A? Most scholars and executives intuitively sense that cultural differences matter in M&A, but when they matter, under what conditions they matter, and how they matter are currently poorly understood. Narrative reviews (Cartwright and Schoenberg 2006, Schweiger and Goulet 2000, Stahl et al. 2005, Teerikangas and Very 2006) have generally concluded that the empirical findings present somewhat of a puzzle—while some studies report negative effects, others suggest that differences in organizational or national culture are positively related to the performance of firms engaging in M&A activity.

In an attempt to reconcile these conflicting perspectives and findings, we developed a set of hypotheses regarding mechanisms by which cultural differences may influence M&A performance. The results of a series of meta-analyses suggest that cultural differences affect sociocultural integration, synergy realization, and shareholder value in different—and sometimes opposing—ways, depending on aspects of the acquirer-target relationship such as the dimension of cultural differences separating the two companies, and the degree of relatedness. In interpreting the meta-analytic results, however, it is important to note that the mean effect sizes obtained are consistently small (Cohen 1977). For example, the meta-analysis of sociocultural integration outcomes yielded a mean effect size of 0.09, which means that cultural differences accounted for only a small proportion of the variance in sociocultural integration outcomes. Based on these findings, it might be concluded that analysis of premerger cultural differences has little value in predicting postmerger integration outcomes.

However, we believe that this conclusion is premature for two reasons. First, to put them in perspective, the effect sizes obtained in this meta-analysis must be compared with those found for other antecedents of M&A performance. For example, King et al. (2004), in their meta-analysis of postacquisition performance research, found that none of the most commonly studied antecedent variables were significant in predicting acquisition performance. Given that existing empirical research has failed to identify the factors that affect the performance of firms engaging in M&A activity, it would seem that even small effect sizes are theoretically and practically meaningful, especially when the predictor variable of interest—cultural differences—is somewhat underrepresented in M&A performance research.

Second, although the averaging of effect sizes and the use of the proportion of variance explained are standard practice in meta-analysis (Eden 2002), it is important to note that this practice can lead to wrong conclusions about the significance or strength of effects because positive and negative effect sizes may cancel each other out when averaged and combined into an aggregate population estimate. Positive and negative effects may cancel each other out when averaged and combined into an aggregate population estimate. In this meta-analysis, while the main effect analyses yielded mean effect sizes close to zero, the effects found in the primary research studies ranged from highly negative to moderately positive. This clearly suggests that cultural differences matter in M&A, but they seem to present a “double-edged
sword” or a “mixed blessing.” Thus, cultural differences may be positively or negatively associated with M&A performance, depending on factors that are currently poorly understood.

It is the ability of meta-analysis to disaggregate the results of studies and detect moderating effects that were not testable in the primary studies that produced the most interesting results in this meta-analysis. For example, subgroup analyses suggest that the effects of cultural differences on stock market-based performance measures are sensitive to the time of measurement and whether the focal organization studied is an acquiring firm or a target firm. Although cultural differences accounted for a substantial proportion of the variance in stock market returns for the acquiring firm’s shareholders, an inverse and much weaker relationship was found in studies that used samples of target firms. Aggregation of effect sizes across all studies, regardless of whether the sample included acquiring or target firms, would have resulted in a mean effect size of zero—and the erroneous conclusion that stock market returns are unrelated to cultural differences. Thus, researchers may indeed be comparing apples and oranges when lumping manifestly different subclasses of M&A (and M&A performance measures) into one category.

Collectively, the meta-analytic results support the conclusion that cultural differences can be both an asset and a liability in M&A, depending on the degree of relatedness and the dimension of cultural differences separating the firms. The results of moderator analyses suggest that in related M&A that require higher levels of integration, cultural differences—especially those at the organizational level—can create obstacles to reaping integration benefits by exacerbating sociocultural problems in the postmerger integration phase. In M&A that require lower levels of integration, cultural differences—especially those at the national level in cross-border M&A—were found to be positively associated with integration benefits, without leading to major sociocultural integration problems that can undermine the realization of projected synergies. These findings suggest that the cultural issues inherent in cross-border M&A may actually not represent the daunting hazard they are sometimes made out to be in the popular press (Larsson and Finkelstein 1999). The results also point to the complex interaction between cultural differences and aspects of the integration design, and the dilemma posed by M&A that require high levels of operational integration (e.g., Goulet and Schweiger 2006, Weber 1996). While high levels of integration may be necessary to fully exploit synergies, the associated sociocultural problems increase the risk of failed implementation and can undermine the realization of synergies.

Limitations and Implications for Future Research

This study provided some new insights into the performance implications of cultural differences in M&A. However, there are several possible limitations, as well as avenues for future research.

First, studies that examine the impact of premerger cultural differences on postmerger performance, almost by design, promote a static view of the role of culture in M&A. This is because they tend to pay little or no attention to the mechanisms by which cultural differences affect M&A outcomes, thereby treating the integration process as a “black box.” There are a number of issues related to the process of integration that deserve further exploration, including the temporal dimension of the integration process; how the sociocultural and task integration processes interact to facilitate the realization of synergies; and how differences in culture foster the transfer of capabilities and learning. These and other important aspects of the integration process cannot be easily uncovered through cross-sectional studies and survey designs. Longitudinal case studies (e.g., Sales and Mirvis 1984, Yu et al. 2005) and field experiments (e.g., Schweiger and DeNisi 1991, Schweiger and Goulet 2005) can help to establish causality and provide a richer understanding of the mechanisms by which cultural differences affect the success of M&A.

Second, most of the studies included in this meta-analysis inadequately controlled for variables that potentially moderate the relationship between cultural differences and performance. Of the numerous moderators of the culture-performance relationship proposed in the M&A literature, only two—level of culture and degree of relatedness—have been examined with sufficient frequency to be meta-analyzed. Both these moderators are structural rather than process oriented; consequently, they capture only static aspects of the acquirer-target relationship. However, the management-oriented literature on M&A (e.g., Evans et al. 2002, Marks and Mirvis 1998, Schweiger 2002) is filled with examples of cultural differences having a positive or negative effect on M&A outcomes depending on how cultural differences are managed. Few studies have specified and examined these process-oriented moderators, which may include variables such as degree of autonomy removal (Weber 1996), acquirer cultural tolerance (Chatterjee et al. 1992), or leadership effectiveness (Kavanagh and Ashkanasy 2006), and this is a much-needed future direction. More sophisticated moderator analyses may well reveal that it is not cultural differences per se that create problems in M&A, but rather the way cultural boundaries are drawn and organizational integration is managed.

Finally, a number of conceptual and methodological concerns have arisen in this meta-analysis that need to be addressed in future research. Perhaps the most critical question is related to the construct validity of the main variables of interest, i.e., how cultural differences and M&A performance were operationalized and measured in the primary research studies. With regard
to the former, we found that the majority of studies relied on the Kogut and Singh (1988) index, a composite measure of Hofstede's (1980) dimensions of national cultures. The conceptual and methodological problems inherent in the cultural distance construct in general and the Kogut and Singh (1988) index in particular are well documented (Harzing 2004, Shenkar 2001), yet researchers investigating the culture-performance link in M&A keep using this measure. Even more problematic are studies that assess cultural distance indirectly, using a measure of domestic versus cross-border M&A as a proxy. In these studies, the effects of cultural differences are inextricably confounded with other dimensions on which cross-border and domestic M&A differ.

For future empirical studies, we recommend the use of an alternative cultural distance measure, such as the Euclidean distance index developed by Drogendijk and Slangen (2006) or the more comprehensive measure of "psychic distance" proposed by Dow and Karunaratna (2006), which includes differences in culture, language, education levels, industrial development, political systems, time zones, and even previous colonial ties. These measures could be used in addition to or in lieu of the Kogut and Singh (1988) index, and should be supplemented with direct measurements of cultural differences.

This meta-analysis examined two performance outcomes: synergy realization and shareholder value. In so doing, we followed the recommendation of King et al. (2004) that M&A researchers employ multiple performance measures to facilitate cumulating research across disciplines and to improve the understanding of differences between stock market and accounting measures. Although there are limitations to both types of measures, stock market- and accounting-based measures are by far the most frequently used metric to assess M&A performance (Datta et al. 1992, King et al. 2004). In an attempt to bring the dependent variable of interest closer to the phenomenon under investigation, we introduced a third type of outcome measure: sociocultural integration outcomes, which capture the "softer," less tangible cultural, organizational, and human resources implications of M&A. Conceptualized as a mediating variable in the relationship between cultural differences and M&A performance, sociocultural integration outcomes may be missing in our understanding of the performance implications of cultural differences in M&A. How these outcomes are affected by cultural differences and how they in turn affect the performance of firms engaging in M&A activity should be addressed by future research.

Conclusion

The results of this study suggest that whether cultural differences have a positive or a negative effect on M&A performance—or any effect at all—depends on a number of contingencies, including the degree of relatedness and the dimension of cultural differences separating the merging firms. In addition, consistent with a "process perspective" on M&A (Haspeslagh and Jemison 1991, Jemison and Sitkin 1986), the findings suggest that the ability to manage the integration process—particularly the sociocultural aspects—in an effective manner is a key factor in determining the extent to which synergies are realized. We recommend that future research be directed towards opening the black box of M&A integration. The question is not whether cultural differences matter in M&A, but how they affect the integration process, and what can be done to manage them more effectively.

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Endnotes


These studies were excluded because their results are based on the same sample as those of a study included in the meta-analysis: Datta (1991), Larsson and Risberg (1998), Morosini and Singh (1994), Schoenberg (1996), and Vermeulen and Barkema (2001).

Other studies excluded that were not referenced in text are as follows: Capron (1999), Markides and Ittner (1994), Very et al. (1997), and Weber and Pliskin (1996).

2The detailed results of the subgroup analyses can be obtained from the first author.

References


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Stahl and Voigt: Do Cultural Differences Matter in Mergers and Acquisitions?


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