Determining Top Managements' "Value": Pre/Post Acquisition

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Employing an acquisition is one of the primary methods of growth utilized by organizations. In 2005, an estimated $2.9 trillion worth of acquisitions were made globally. One of the critical factors in valuing an acquisition is the determination of the value of intangible assets held by the company. This paper will explore the value of one of these key intangible assets that the top management team maintains in regard to pre and post-acquisition performance of the organization.

"As organizations move into the 21st century, past measures of organizational performance based largely on accounting and financial statements will be insufficient to meaningfully assess value, particularly relative to human capital valuation."

(Lusch, Harvey & Speier, 1998, P. 715)

A focus on alternative management accounting methods (Baxter & Chua, 2003) relative to intangible assets (Mueller, 2004) continues to be an ongoing concern of management, accountants, as well as external stakeholders. The role of accounting in the post Enron era is attempting to preserve their value-added role in the governance of global organizations. At this time, accurately accounting for intangible assessment during acquisitions appears to be of paramount importance, especially since the 1980's takeover-rich world where traditional accounting did not consistently capture the economic value of many firms (Power, 2001).

In what appears to be an unrelenting quest for limited resources, the need to capture unique combinations of human resources (i.e., management team tacit knowledge) to gain competitive advantage, the necessary speed of getting products to a market to remain competitive, the growing importance of relational marketing efforts and the resulting synergistic marketing channel strategies, an ever increasing number of firms are focusing on acquisitions to address these marketplace challenges more than ever before. As evidence, in 2005, global mergers and acquisitions transactions with an estimated worth of $2.9 trillion were announced, which was a 38 percent growth from 2004 (*Wall Street Journal*, 2005).

The challenge accountants must now address is how to valuate resources for key production factors that take on different immaterial/intangible form (Lusch, Harvey, & Speier, 1998; Harvey & Lusch, 1999; Grojer, 2001). The relevance of accounting 'numbers' in an acquisition is intensified as the gap between book value and market value continues to grow (Lusch, Harvey & Speier, 1998; Power, 2001). Fortunately, managers, as well as academics, are becoming keenly aware of the intangible value of a firm as they attempt to address the intricate issues associated with the valuation of an acquisition in the global knowledge economy of the 21st century (Johanson, Eklov, Homgren & Martensson, 1999; Johanson, Martensson, & Skoog, 2001). These attempts at valuing intangible human resources are sometimes referred to in annual reports so as to allow investors to gain a clearer understanding of the 'soft' value of assets in the firm (Erhvervsudviklingsradet, 1997; Guthrie, Petty, Ferrier & Wells, 1999).

Currently, the unallocated residual of fair market value over the book value of the acquired firm's recognized net assets (e.g., goodwill) is recorded without regard to specific intangible asset valuation. Some researchers suggest that this difference is intellectual capital, or intangible assets such as human capital, relationships, quality of management, market power (e.g., market share) and the like (Brown, Osborn, Chan & Jaganathan, 2005). However, goodwill is typically not identified as a 'specific' intangible asset, thereby increasing the difficulty in the final determination of a value of a potential acquisition. This reluctance and inability to break goodwill into its component parts makes the valuation process significantly more subjective. For example, the banking industry's intangible assets account for 30% of their equity, which is up from 8 percent a decade ago (Davenport, 2005).

This research suggests that the top management team (TMT) is an intangible asset of a successful firm that should be recognized, as the loss of these managers potentially could have a negative effect on the financial performance of the firm. In the case of acquisitions, potential loss of these successful managers could be considered an accrued intangible liability. Our research empirically examines an intangible human resource asset and its valuation in acquisitions; that of the TMT of a successful target firm (the firm being acquired) and post-acquisition performance. We utilize the resource based theory and the upper echelon theory as foundations for our research.

In essence we will explore the value of the retention of the TMT after acquisition (intangible asset) versus the valuation of a target firm in regard to a contingent intangible liability at their loss. A survey of 102 top executives of acquiring firms suggests that in acquisitions, the TMT of a successful firm is a valuable intangible asset. On the other hand, any potential loss of top managers will hurt post-acquisition performance and accountants should (theoretically) record an intangible accrued liability when it is probable that this intangible asset had been impaired (loss of the valuable TMT) and the amount of loss can be reasonably estimated (FASB Statement #5).

What are Intangible Assets?

Balance sheet assets, liabilities and owners equity are relatively determinable through an accurate accounting system, although accounting valuations and classifications differ globally (e.g., asset depreciation methods and/or fair market valuations). However, intangible assets (e.g., knowledge process, personnel, TMT, patents, brands, and networks) and the related intangible liabilities (e.g., a weak strategic planning process, unsafe work conditions, potential environmental cleanup, potential product tampering, and/or poor corporate reputation) are significantly more difficult to evaluate (Harvey & Lusch, 1999).

Specific to each successful company is a core competency, or a unique amalgam of skills, resources, technologies and people that make a company a leader in a specific area (Valentino, 1992; *Planning Review*, 1994). Core competencies are described as unique, sustainable and inimitable by competitors. These core competencies are frequently composed of intangible assets that allow a company to effectively compete in the marketplace and differentiate itself from other competitors (Willens, 1993; Prahalad & Hamel, 1990). Loss of these intangible assets after an acquisition will hurt post-acquisition performance of the target firm. For example, nearly 40 percent of the financial advisors (or over 200) of Advest Group Inc., decided to leave the firm rather than work for the acquirer, Merrill Lynch & Co. Although Merrill has over 14,000 financial advisors of their own, this loss of target firm key employees suggests that Merrill Lynch paid too much (*Wall Street Journal*, 2005).

Some of the most admired companies in the world (ex: General Electric, Starbucks, Nordstrom, Microsoft) are thought of as industry leaders due in large part to their intangible capabilities. These capabilities are the collective skills, abilities and expertise of an organization that are the outcome of investments directed by top managers in staffing, training, communication and other human resource areas (Ulrich, 2004). Intangible assets may be as much as 60% of a company's market value (Hurtado, Heredia & Calatayud, 2005) and proper management of these intangibles can represent a significant increase in a company value (Zabala, et al., 2005).

There are two sides to the valuation of a potential acquisition: the hard-side and the soft-side. The hard side considers the financial statements of the target firm (e.g., balance sheet, income statement, cash flow, as well as a variety of financial ratios) and the soft side considers all intangible assets and liabilities. There is no absolutely clear definition of what constitutes an intangible asset; but from an accounting viewpoint, intangible assets do not have physical substance; they may grant rights and privileges to a business, they are inseparable from the enterprise, or they are assets whose determination and timing of future benefits is very difficult.

Offsetting intangible assets is an intangible liability. Potential intangible liabilities have been broken into internal and external groups with four categories:

1.) Process issues (ex. inadequate R&D, low commitment/trust of suppliers/ distributions system,

2.) Human capital issues (ex. high employee turnover, negative word-of-mouth among customers),

3.) Informational issues (ex. lack of adequate information structure, decreasing corporate reputation) and,

4.) Configuration issues (ex. lack of flexibility in organizational structure, lack of strategic alliances to leverage resource base) (Harvey & Lusch, 1999).

Many of these intangible liabilities are likely to occur after firm acquisition (ex. information structure breakdown, strategic alliance failure to leverage resource base, loss of the TMT, loss of boundary spanners, low commitment/trust of supplier/distribution system, etc.).

Why Use a Resource-Based View/Upper Echelon Theory to Examine the Valuation of Intangible Assets?

The intangible value of the TMT of a successful firm and the importance of their strategic decisions has been researched extensively. Prompting some researchers calls for an off-balance sheet controller to 'manage'/account for the intangible assets such as TMT (Lusch & Harvey, 1994). Many researchers focus on a managerial view of acquisitions with a focus on how goals are developed, resources are allocated, and individual's efforts are coordinated to build congruence in the overall direction adopted by the company (Doz, 1991).

Upper echelon theory develops a linkage between the TMT and the development of strategic assets. This concept puts the focus on TMT behavior, rather than a single individual such as the CEO (Hambrick & Mason, 1984). This research suggests that the organization becomes a reflection of the TMT and assists in explaining the competitive behavior of the firm. As much as the strategic knowledge is tacit (e.g., TMT experience, TMT guidance, etc.), loss of the TMT from a previously successful target firm after acquisition could negatively affect post-acquisition performance. Perhaps the most important group in an organization is the TMT. The TMT of an organization ranges from as little as three to ten people and is at the apex of the organization where it provides strategic leadership (Finkelstein & Hambrick, 1996). Successful firms owe their success to these small groups of executives that develop strategy and direct the resources that combine both the tangible and intangible facets.

In a broader sense, organizations have developed certain rules and processes that determine who holds the power and how it is executed. This is based on social values developed on agreement amongst the participants (Pfeffer, 1981; Salancik & Pfeffer, 1977). A bounded rational TMT affects a firm's strategic choice and the subsequent performance of the firm due to these decisions. The TMT's decisions direct the firm towards higher or lower performance. For example, when AOL's Robert Pittman in 2000 took over Time Warner, he argued that the online upstart and venerable media conglomerate could win more advertising dollars by working together. He set overly ambitious growth targets and derided seasoned Time Warner executives, who pointed out that the package deals involved giving advertisers discounts that were too deep (*Wall Street Journal*, 2002). Mr. Pittman's strategy collapsed due to corporate infighting and disinterest among advertisers in this strategy of cross-media deals. Mr. Pittman eventually quit after his growth targets were discarded and investor credibility was at an all time low.

The dynamic capabilities perspective provides another useful theoretical perspective for examining the TMT's behavior and helps one develop a more comprehensive perspective (Madhok & Osegowitsch, 2000). Dynamic capabilities refer to the development of management capabilities and difficult-to-imitate combinations of organizational, functional and technological skills to gain/sustain a competitive advantage (Teece, et al., 1997). The TMT can play a major role in this process.

Dynamic capabilities necessitates having the TMT develop overall organizational coherence. Such coherence must recognize the unique features of the internal and external environment to facilitate customization of strategies while focusing attention on the adaptation, integration and reconfiguring of both internal and relational resources to match the opportunities in the global and local marketplaces (Teece, et al., 1997).

Dynamic capabilities theory is derived from the resource-based theory of the firm that focuses on firm-level resources (internal factors semi-permanently linked to the organization) that provide the firm with a unique competitive posture (Barney, 1991; Dietrick, Cool & Barney, 1989; Wernerfelt, 1984). Resource-based theory of the firm theorizes that the accumulation of resources, that are: 1.) valuable; 2.) rare; 3.) imperfectly imitable; and 4.) for which there are not strategically equivalent substitutes creates resource position barriers to deter competition, and competitive advantage resulting in above-normal returns (Barney, 1991; Peteraf, 1993; Wernerfelt, 1984).

Alternatively, the dynamic capabilities perspective argues that capabilities are more substitutable across different contexts as well as equifinal, thus rendering inimitability and immobility irrelevant to sustained competitive advantage (Eisenhardt & Martin, 2000). As such, the dynamic capabilities perspective is focused on the strategic employment of key resources, as opposed to the ownership of the resources themselves and application in a stable environment. The TMT's decisions as to the direction and employment of strategically key resources are often what create value for firms and performance. Dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource reconfigurations as markets emerge, collide, split, evolve, and die (Eisenhardt & Martin, 2000). The firm's internal resources are not considered stable, but must be bought, sold and developed by the TMT as the strategy changes to compete in the dynamic environment.

Why is it Important to Retain TMT Intangible Asset?

TMT retention as a group is important as in accordance with the idea of bounded rationality, that the creation of new knowledge, acquisition of existing knowledge, and storage of knowledge cannot be performed by one individual. Therefore, the TMT are experts that specialize in particular areas of knowledge. Knowledge-based theory suggests that the TMT develops rules and directives to facilitate knowledge integration based upon specialist expertise (Grant, 1996). Also, knowledge assets remain with individual employees and cannot be readily transferred with the most complex tacit knowledge resident in the TMT. From this argument, it would follow that the greater the pre-acquisition performance of the firm, the greater the intangible asset value of the TMT and the more likely this intangible asset will be retained.

The TMT of a successful target firm is an important intangible asset and even more important after the acquisition process is completed (Lusch, Harvey & Speier, 1998). Before acquisition, these managers prepare the firm's employees for the transition, establish ties between the two firms, and assist in due diligence. After acquisition, top managers continue to work to integrate the firm into the acquiring company and continue their strategic leadership. Ongoing post-acquisition performance of the firm may decrease by the loss of these integral leaders.

After acquisition, top managers of the target firm are viewed as critical to enhancing post-acquisition performance as the TMT possesses knowledge critical to ongoing business operations. Their departure may subsequently heighten the level of disruption and uncertainty in the firm (Cannella & Hambrick, 1993; Krishnan, et. al., 1997; Singh & Zollo, 1998). The organization's culture, strategy, and dynamics are all dependant upon the TMT (Cyert & March, 1963; Pfeffer, 1981b; Salancik & Pfeffer, 1977).

Development of the organization's culture, strategy and dynamic capability by the TMT are assumed to be performed with the objective of building the economic value of the firm and to develop the cognitive capability to create economic value, therefore needing to be maintained and/or protected (Harvey & Lusch, 1997). This process will occur through the integration of complementary human resources and development of a synergistic environment (Seth, et. al., 2000; Eun, et. al., 1996). Through the guidance of the TMT, corporate culture development, employment practices, and deployment of human resources have all been influenced by these internal factors. Decisions have been made by the TMT to align the human resource skills and strategy affecting performance (Wright, Mcmahan & Smart, 1995). Also, the TMT, through their strategic choices, is a main component that determines the success or failure of an organization (Andrews, 1971; Ansoff, 1988; Child, 1972; Priem, 1994). Strategic leadership theory holds that companies are reflections of their top managers and that the specific knowledge, experience, values and preferences of top managers are reflected not only in their decisions, but also in their assessment of decision situations.

Loss of the TMT can be compared to the morale decline associated with the downsizing of a firm. The downsizing literature suggests that firms undergo a deterioration of communication at many levels even though communication is particularly important at the time of downsizing, as well as during acquisitions.

Dismissal of the TMT during the acquisition period will also affect the communication within the firm and aggravate the high levels of uncertainty. In addition, the loss of the acquired TMT could affect creativity or innovation, negatively affecting the post-acquisition performance of the acquired firm. Some of the environmental factors that are considered important for creativity and innovation in organizations are an open information flow and support for new ideas at all levels of the organization, from top management, through immediate supervisors to work groups. Potential loss of the TMT as a result of a successful loss after acquisition could well be considered an intangible liability (Harvey & Lusch, 1997, 1999).

To alleviate potential post-acquisition problems, many purchasers may be more inclined to make changes and increase governance (Krug & Hegarty, 1997). After acquisition, the purchasing organization strives to create a situation where all the internal and external resources are joined, working together towards the mutual goals and objectives. The target TMT's participation in the buy-in, development and implementation of known monitoring systems is essential to engender cooperation (Cartwright & Cooper, 1993).

Following an acquisition, some degree of inter-organizational integration is necessary. However the level of integration to implement must be decided, as under- or over- integration can result in failure to create value, or have value destruction. The realization of potential synergies could fail with an insufficient level of integration, while excess reconfiguration can hurt as executives depart in unfavorable circumstances (Cannella & Hambrick, 1993; Hambrick & Cannella, 1993).

In summary, retention of a successful target firm's TMT after acquisition will facilitate the integration of the acquired firm and these individuals could be the intangible asset that attracted the acquisition and gave rise to the valuation of the target firm. From a resource-based perspective, these individuals lead the firm, direct resources, motivate, and are aware of the resources to develop the synergies that may arise between two firms. Positive pre-acquisition performance could indicate their importance by acquiring the firm that will attempt to retain them. Therefore;

H_1: The greater the pre-acquisition performance of the acquired firm, the more likely the intangible asset, TMT, of the acquired firm will be retained

Why Retain TMT Intangible Asset Post-Acquisition?

A successful TMT's strategic decisions will positively affect performance (Child, 1972; Volberda, 1996; Fiol, 1991; Lado & Wilson, 1994; Lee & Miller, 1999). These individuals develop goals, allocate resources, and coordinate individuals' efforts to build congruence in the overall direction adopted by the company (Doz, 1991; Doz and Prahalad, 1986). Therefore, loss of the TMT may impair the development of the new goals and role the acquisition will perform, and becomes an intangible liability, as this loss of the TMT in turn will negatively affect the performance of the acquisition.

From the strategic choice perspective, Child (1972) claims that managers have discretion and that the decisions they make are of vital importance to the success of the organization. Top management is often viewed as critically involved in formulating and implementing strategy to provide superior performance for the organizations. The task of management is to provide dynamic capabilities for organizational flexibility and to configure an organization for the preservation and control of technology, structure, and culture (Volberda, 1996). Thus, the TMT is an integral part of the value of the acquisition by developing its strategy, organization, and leadership.

The human dimension (the TMT in this instance) is critical to effective execution of strategy (Fiol, 1991; Lado & Wilson, 1994; Lee & Miller, 1999) as well as the development and dissemination of knowledge and organizational learning within the organization (Fiol, 1991; Hall, 1992; Miller & Shamsie, 1996). A study by Lengnick-Hall and Wolff (1999) using three perspectives in strategy (resource based, hypercompetitive and high-velocity, plus ecosystem and chaos theory-based views) established common themes concerning this human capital dimension. These concepts include: developing effective exchange relationships (e.g. Porter, 1985), understanding that strategy and context are dynamic (e.g., Barney, 1991), and emphasizing the performance "numerator" rather than the cost "denominator" (e.g., Eisenhardt & Tabrizi, 1995). The performance "numerator" suggests a superiority of product or service that will require a talented TMT for continued post acquisition performance of the acquired firm. In effect, loss of the TMT of the acquired organization may directly affect post-acquisition performance of the acquired firm, exchange relationships (within and without the organization), and strategy regarding the specific market context. Thus we propose:

H_2: There is a positive relationship between post-acquisition performance of the acquired firm and degree of retention of the intangible asset, TMT, of the acquired organization.

The Study

Data Collection

We considered several factors before conducting the empirical tests of the proposed relationships in our model. First, the model does not lend itself to a study using secondary (archival) data. Due to the perceptual nature of the evaluation of target firms' post- and pre-acquisition performance and TMT retention, survey data collection is most appropriate. Also, for most firms, acquisition financial performance information is consolidated if reported publicly, hence, specific acquisition performance data would not be available and secondary data likely will not be available at all. As such, to ascertain post-acquisition performance of the acquired firm, perceptual data from key informants likely would provide the best test of the model. Insider (key) informants have been used extensively in a variety of research (Dean & Sharfman 1996).

Sample

The individuals we surveyed came from an Ernst and Young database of top executives who have participated in Mergers and Acquisitions. The database contained 807 names, 610 of which were usable. Examples of the titles of the individuals that were sent the surveys were Vice Presidents (110), Senior VP (23), CEOs (24), CFOs (25), Director (49), etc. These are senior managers who have been directly involved in a recent acquisition and are aware of the post-acquisition performance of the acquired firm. We received a sample of 102 useable responses for a response rate of 17%. Response rates for surveys of senior management are typically very low, so we were pleased with the number of responses we obtained, as it is consistent with similar surveys. A total of 72 Industries were represented in the data. Surveys were mailed to the final list in three separate waves to elicit as many responses as possible.

Measures

Post-Acquisition Performance: There is no agreement on the best way to measure acquisition success, or at what point in the process a measure should be taken. The results of acquisitions are difficult to assess accurately, both in terms of the indices used and the appropriate time span over which to judge acquisition performance (Lubatkin, 1983; 1987). Prior acquisition research has focused on such variables such as potential growth rate and target evaluation, communication effectiveness (Schweiger & DeNisi, 1991), achievement of merger goals (Cartwright & Cooper, 1992), organizational culture fit (Buono, Bowditch & Lewis, 1995), and retaining the TMT (Hambrick & Cannella, 1993).

However, narrowly focused financial analyses of acquisitions frequently fail to recognize that acquisitions have important intangible aspects as well. In focusing only on financial results such as income statement ratios and balance sheet issues, the role of people, knowledge gained, or other subtle goals are often overlooked (Hunt, 1987). We measured acquisition performance at the level of the acquisition, not at the level of the combined firm. Organizational performance metrics have been criticized in the past for not measuring what the researcher is attempting to measure. The rationale for measuring at the acquisition level results rather than with organizational level indicators is that the TMT of the acquisition is the focus of our research. As such, though the acquisition itself is an organizational phenomenon, we focus on acquisition performance as it is more closely linked to the performance and importance of TMT.

The three areas of acquisition performance examined were: perceived financial acquisition performance, goal attainment, and satisfaction with employees. These three scales represent financial plus non-financial outcomes and a comparative method is more effective in eliciting responses than asking respondents directly to provide exact numbers for acquisition performance (such as dollar amount of sales, market share, etc.) (Lau & Ngo, 2001; Tomaskovic-Devey, Leiter & Thompson, 1994). We developed our scale by adapting pre-existing measures from Lau and Ngo (2001), plus those from Cannella and Hambrick (1993) based on suggestions from our expert panel and the information we acquired from pilot testing.

TMT Retention: This construct refers to the extent to which the acquiring firm was able to retain the target firm's TMT. We measured retention in two ways: 1.) as a proportion of executives that were retained, similar to Cannella and Hambrick (1993), and 2.) the perceived volume of valuable executives retained. As suggested by the responses we received during pilot testing and from the expert panel, simply examining the number of executives retained for small to medium sized firms would not provide a full picture. Although we argue the TMT is valuable it is also true that there are also those individuals in smaller firms that may be (for example) relatives with an executive title (or similar situations), but of no value. Therefore we explore both the number of executives retained and whether or not the valuable executives were retained.

Pre-Acquisition Performance: For our measure of pre-acquisition performance, we asked respondents to evaluate performance with regard to other firms in the target's industry. The items included financial performance as well as success factors relative to other firms in the industry.

Control Variables: Several key variables have been identified in the literature as potentially affecting the performance of a target firm after acquisition. Our review of the literature suggested that size, type of purchase, and ownership structure of the target firm were likely to explain the most variance in post acquisition performance. As such, we included each one in our analyses.

Size: Size differences between acquiring and acquired firm may influence acquisition performance. Increases in organizational size add complexity with attendant increases in structural elaboration and formalized systems for planning, control, and resource allocation. As a result, increases in organizational size can create progressively stronger resistance to fundamental change. Some researchers suggest that the smaller an acquired firm is relative to an acquiring firm, the greater an acquired executive's propensity to depart. Consistent with previous work in the acquisition literature, we calculated size by dividing the sales of the acquired firm before acquisition by the sales of the acquiring firm (Hambrick and Canella, 1993).

Type of Purchase: Our second control variable was the method by which the firm was purchased. From the acquirer's perspective, they can use their cash holdings, increase their debt by borrowing, sell more equity, or a combination of these with managerial ramifications for each option. However, as our focus is on the target firm's TMT, their retention and value to post-acquisition performance, we are concerned with what the target firm receives and in what form. For example, a cash purchase may unduly enrich the target firm TMT (assuming they are stock holders) who then may wish to exit the situation while a stock purchase may encourage the target TMT to continue their association. As these were nominal measures all were incorporated into the regression as dummy variables.

Ownership of Target Firm: We also controlled for the ownership structure of the target (i.e., privately owned, publicly owned with dispersed stockholders, or publicly owned with few majority stockholders). Privately owned firms will also typically be managed by an owner who is also a member of the TMT. Purchasing a privately owned firm may or may not suggest that the owner is either retiring or going to pursue other interests. Consistent with the RBV, the owner may only be seeking resources from the acquiring firm with which to continue and be more successful. A publicly owned firm with diverse investors will be managed by a TMT of experts. These also were nominal measures and were included in the regression as dummy variables.

Response Bias and Subjectivity: Given the necessity to use a survey approach with perceptual data for this study, it is essential that we assess issues of response bias and subjectivity in the data. Managers that are familiar with mergers and acquisitions are typically TMT members who may not readily respond to surveys unless complete confidentiality is guaranteed. As such we could not compare respondents to non-respondents to see if bias existed.

Given the number of responses that that we received, we were able to use extrapolation methods to examine non-response bias. Extrapolation methods are based on the assumption that subjects who respond less readily (late responders), are more like non-respondents rather than early responders. The most common type of extrapolation is carried over successive waves of a questionnaire. We used wave analysis employing MANOVA to check for non-response bias by examining selected scale items from each construct. Each of the major survey waves was counted as a separate data collection, totaling three waves. We performed a wave analysis, in the form of MANOVA, and found no significant differences between each wave. Because prior research in the survey research suggests that late responders are more similar to non-responders than early responders, this result increases our confidence that any results we discover do not stem from non-response bias.

To limit the potential for response bias within the survey, we switched anchors on items throughout the instrument. Specifically about 60% of the items indicated in the stem would be phrased "strongly agree," so as to indicate agreement with a positive statement. In approximately 40% remaining items, "strongly agree" would indicate agreement with a negative statement. By switching items in an unbalanced way, respondents are much less likely to fall into a response pattern, as reading each item carefully is ideal before responding.

Key informant survey methodology is championed in having individuals most knowledgeable about the phenomenon of interest respond to the survey. The approach also has some potential drawbacks, that of informant bias and random error. Since our sample used key informants that occupy roles that make them knowledgeable about the issues being researched plus were both able and willing to communicate with the researcher, we suggest that key informant bias is not a major consideration. Retrospective reports in regard to perceptions have been researched (Huber & Power, 1985) utilizing executive's retrospective accounts to identify firm strategy (Boeker, 1989), planning processes (Eisenhardt & Bourgeois, 1988) and strategic and organizational change (Smith & Grimm, 1987). Using sole informants at high levels such as CEOs may actually increase the validity of, or one's confidence in results due to the comprehensive knowledge such informants possess (Sharfman, 1998). Additional research concludes that retrospective reports are an effective technique for management research.

Analysis

We began our analysis with an assessment of the multivariate and univariate normality of the data as well as its skewness, kurtosis, and outliers which we performed using Q-Q (P-P) plots and standard tests for each indicator. Review of the skewness and kurtosis statistics suggest that no transformations were required as all the skewness and kurtosis numbers fall below 1.96, which corresponds to a .05 error level (Hair, Anderson, Tatham & Black, 1998). In addition, one can also use the skewness and kurtosis values as statistical tests to assess normality. For example, a calculated value exceeding ±2.58 indicates we can reject the assumption about the normality of the distribution at the .01 probability level. Another commonly used critical value is ±1.96, which corresponds to a .05 error level (Hair et al., 1998). As all our values are less than 1.96 we can conclude that no variations of multivariate or univariate normality are present.

We utilized Harman's one-factor test to assess the degree of common method variance due to the fact that all data came from the same survey. The result of this procedure suggests that a single factor did not emerge, nor did one general factor account for the majority of variance indicating no effect of common method variance.

For construct validity, we performed exploratory factor analysis to see if a unidimensional solution came out of the exploratory analysis. Our sample size was not sufficiently large for us to have confidence in a confirmatory factor analysis. Utilizing SPSS, we took the items for each of the constructs and ran factor analysis. For each of our independent and dependent variables we found that each construct's items were all significantly correlated ($p < .001$) in accordance with the Bartlett test of sphericity. The Kaiser-Meyer-Olkin measure of sampling adequacy (MSA) suggested high intercorrelation among the items for each of the constructs. A review of the correlation matrix suggests that the correlations among the independent variables are low enough to indicate divergent validity as well.

Results

Tables 1a and 1b present the means, standard deviations and correlations for our variables. Tables 2a- 4b presents the results of the tests of hypotheses:

Table 1a: *Descriptive Statistics*

	Mean	Std. Deviation	N
Post_Acquisition Performance	4.66013	1.42500	102
RET-TOT	4.4036	1.96199	102
Pre_Acquisition_ Performance	4.740	1.5423	102
Size	.3081	.91733	102
Ownership_of_firm	1.99	.724	102
Type_of_Purchase	2.33	1.437	102

Table 1b: *Correlations*

		Post_ Acquisition_ Performance	RET-TOT	Pre_ Acquisition_ Performance	Size	Ownership of_firm	Type of Purchase
Post_Acquisition_ Performance	Pearson Correlation	1	.403**	.096	-.165	-.163	.086
	Sig (2-tailed)		.000	.336	.096	.101	.390
	N	102	102	102	102	102	102
RET-TOT	Pearson Correlation	403**	1	.464	.070	-.030	-.036
	Sig (2-tailed)	.000		.000	.483	.763	.716
	N	102	102	102	102	102	102
Pre_Acquisition_ Performance	Pearson Correlation	.096	.464**	1	-.100	.033	.089
	Sig (2-tailed)	.336	.000		.318	.741	.376
	N	102	102	102	102	102	102
Size	Pearson Correlation	-.165	.070	-.100	1	.038	-.023
	Sig (2-tailed)	.096	.483	.318		.708	.822
	N	102	102	102	102	102	102
Ownership_of_Firm	Pearson Correlation	-.163	-.030	.033	.038	1	.060
	Sig (2-tailed)	.101	.763	.741	.708		.548
	N	102	102	102	102	102	102
Type_of_Purchase	Pearson Correlation	-.086	-.036	.089	-.023	.060	1
	Sig (2-tailed)	.390	.716	.376	.822	.548	
	N	102	102	102	102	102	102

** Correlation is significant at the 0.01 level (2-tailed).

H1: *Pre-Acquisition Performance and TMT Retention*

Stage	Variable	Equity Beta Standardized Coefficients	
		Beta	*t* Value and Significance Level
1	(Constant)		7.151 (**)
	Size	.151	.701
	Type of Purchase	-.045	-.327
	Ownership of Target Firm	-.084	-.307
Initial R-Squared		R-Squared	F Value and Significance Level
		.007	.234
2	(Constant)		2.482 (*)
	Size	.254	1.329
	Type of Purchase	-.101	-.828
	Ownership of Target Firm	-.125	-.521
	Pre-Acquisition Performance	.615	5.403 (**)
Test of the Change in R-Squared		R-Squared Change	F Value and Significance Level of the R-Squared Change
		.230	7.524 (**)
Total R-Squared		.237	

* = p<.05 **= p<.001

H2: *TMT Retention to Post-Acquisition Performance*

Stage	Variable	Equity Beta Standardized Coefficients	
		Beta	*t* Value and Significance Level
1	(Constant)		12.054 (**)
	Size	-.251	-1.647
	Type of Purchase	-.080	-.819
	Ownership of Target Firm	-.299	1.549
Initial R-Squared		R-Squared	F Value and Significance Level
		.058	1.477
2	(Constant)		8.042 (**)
	Size	-.296	-2.124 (*)
	Type of Purchase	-.101	-.828
	Ownership of Target Firm	-.275	-1.556
	Pre-Acquisition Performance	.298	4.567 (**)
Test of the Change in R-Squared		R-Squared Change	F Value and Significance Level of the R-Squared Change
		.167	7.044 (**)
Total R-Squared		.225	

* = $p<.05$ **= $p<.001$

TMT Pre-Acquisition Performance to Post-Acquisition Performance

Stage	Variable	Equity Beta Standardized Coefficients	
		Beta	*t* Value and Significance Level
1	(Constant)		12.054 (**)
	Size	-.251	-1.647
	Type of Purchase	-.080	-.819
	Ownership of Target Firm	-.299	1.549
Initial R-Squared		R-Squared	F Value and Significance Level
		.058	1.477
2	(Constant)		8.381 (**)
	Size	-.237	-1.543
	Type of Purchase	-.088	-.896
	Ownership of Target Firm	-.305	-1.578
	Pre-Acquisition Performance	.087	.949
Test of the Change in R-Squared		R-Squared Change	F Value and Significance Level of the R-Squared Change
		.009	1.745
Total R-Squared		.067	

* = $p<.05$ **= $p<.001$

To examine all the hypotheses, we used hierarchal linear regression. This is the most appropriate approach to test the hypotheses for two key reasons. First, as the literature is clear on the potential effects that the control variables could have on post acquisition performance, it is essential that the analyses partial any of these effects out before a test of the hypotheses can be performed. Secondly, this method allows us to determine whether our theoretical variables make a marginal (material) difference in the overall level of explained variance beyond that of the control variables which provides a stronger test of the hypotheses. We ran separate regressions for each theoretical variable because their inter-relationships caused co-linearity when all the theoretical variables were included in a single path model.

For $\mathbf{H_1}$ (see Tables 2a and 2b), which predicted a relationship between TMT Retention and Pre-acquisition Performance, the addition of the control variables (e.g., size, type of purchase and ownership of the target firm) was not significant. The addition of the pre-acquisition performance variable to the control variables proved to be significant. The marginal addition in R-squared was .230. The effect of the Pre-acquisition Performance variable was positive, significant and in the predicted direction. Therefore $\mathbf{H_1}$ is supported.

For $\mathbf{H_2}$ (see Tables 3a and 3b), which tested the effect of retention of the TMT of the acquired organization and the target's post acquisition performance, the addition of the set of control variables was not significant. The addition of TMT Retention to the control variables proved to be significant with a marginal addition in R-squared of .167. The effect of the pre-acquisition performance variable is positive, significant and in the predicted direction Therefore, $\mathbf{H_2}$ is supported.

We did not find any correlation between pre-acquisition performance and post-acquisition performance. (See Tables 4a – 4c)

Discussion and Implications

Accounting, finance and management academicians and practitioners are focusing on intangible assets and intangible liabilities, as these are becoming the most valuable competency to a firm in today's global market. This focus is heightened in regard to acquisitions where goodwill is recorded, assets are revalued, and potential intangible liabilities lie hidden. Although much of the value may be recorded as non-human resource assets (e.g., copyrights, trademarks, networks of relationships), the key contributors to the development, coordination, and management of these intangible assets is the TMT.

Our results suggesting that the TMT of a previously successful firm will be retained, facilitates the notion that the acquiring firm will pursue these individuals due to their intangible value. Past research suggests that top managers will leave the firm after acquisition, but managers in today's marketplace understand the need to retain target firm's TMT and will either develop relationships in attempts to retain these individuals, and/or place incentives to assuage their departure.

The fact that firms retaining the TMT of a good performing target firm had better post-acquisition performance than those firms that lost the TMT, suggests (in line with upper echelon and resource based theories) that these individuals are an intangible asset. Thus, identification and recording the transaction as an economic variable is the role of accounting. Assignment of value will require agreement amongst global regulatory bodies for uniformity.

The accounting profession in their role of translating economic value/transactions into numbers will find their discipline continuously evolving. As the intangible value of firms in the global marketplace become more prominent, they will have to develop consistent and accurate methods to valuate firms. In particular, with regard to acquisitions, the intangible value of the TMT of a target firm needs to be taken into account, especially if the loss of these individuals affects future performance. Goodwill recorded and asset revaluation will need to be reconsidered in the focus of identifying the true nature of a premium paid for the intangible assets of acquisitions.

References

Andrews, K. (1971). *The concept of corporate strategy.* Homewood, IL: Dow Jones-Irwin.

Ansoff, H. (1988). *The new corporate strategy.* New York: John Wiley and Sons.

Barney, J. (1991). Organization resources and sustained competitive advantage. *Journal of Management, 17*: 121-154.

Baxter, J & Chua, W. (2003). Alternative management accounting research – whence and whither. *Accounting, Organizations and Society, 28*: 97-126.

Boeker, W. (1989). Strategic change: The effects of founding and history. *Academy of Management Journal, 32*: 489-515.

Bourgeois and Eisenhardt. (1988): Bourgeois, L. & and Eisenhardt, K. (1988). Strategic decisions processes in high velocity environments: four cases in the microcomputer industry. *Management Science, 34*: 816-835.

Brown, A., Osborn, T, Chan, J. & Jaganathan, V. (2005). *Research-technology management.* November-December, 34-41.

Buono, A. F., Bowditch, J. L. & Lewis, J. W. (1985).When cultures collide: the anatomy of a merger. *Strategic Management Journal, 38* (5): 477-500.

Cannella, A. & Hambrick, D.C. (1993). Effects of executive departures on the performance of acquired organizations. *Strategic Management Journal, 14*: 137-152.

Cartwright, S. & Cooper, C. L. (1992). *Mergers and acquisitions: The human factor.* Oxford, Butterworth-Heinemann.

Cartwright, S. & Cooper, C. L. (1993). 'The psychological impact of merger and acquisition on the individual: A study of building society managers', *Human Relations, 46* (3): 327-342.

Child, J. (1972). Organization structure, environment, and performance: the role of strategic choice. *Sociology, 6:* 2-22.

Cyert, R. & March, J (1963). *A behavioral theory of the organization.* Englewood Cliffs, N. J. Prentice Hall.

Davenport, T. (2005). Goodwill takes growing share of equity. *American Banker, 170* (231): 9-13.

Dean, J. & Sharfman, M. (1996). Does decision process matter? A study of strategic decision-making effectiveness. *Academy of Management Journal, 39* (2): pp. 368-397.

Dietrick, I., Cool, K. & Barney, J. (1989). Asset stock accumulation and sustainability. *Management Science, 35* (12): pp. 1504-1514

Doz, Y. L. (1991). Managing MNCs: A search for a new paradigm, *Strategic Management Journal, 12*: 145-165.

Doz, Y. Prahalad, C.K. (1986). Controlled variety: A challenge for human resource management in the MNC. *Human Resource Management, 13*: 135-144.

Economist (2003). GE stars reap big returns. October: 23-26.

Ehrvervsudviklingsradet (1997). Knowledge accounting. *Reporting and controlling knowledge capital.* Copenhagen.

Eisenhardt, K. & Tabrizi, B. (1995). Accelerating adaptive processes: Product innovation in the global computer industry. *Administrative Science Quarterly, 40*: 84-110.

Eisenhardt, K. M. & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal, 21*: 1105-1121.

Eun, C.S., Koldny, R & Schereaga, C. (1996). Cross-border acquisitions and shareholder wealth: tests of the synergy internalization hypothesis. *Journal of Banking & Finance, 209*: 1559-1582.

Finkelstein, S. & Hambrick, D. (1996). *Strategic leadership: Top executives and their effects on organizations.* Minneapolis/St. Paul: West Pub. Co.

Fiol, M.C. (1991). Managing culture as a competitive resource, *Journal of Management, 17*: 191-211.

Foster, D & Jonker, J (2003). Third generation quality management: The role of shareholders in integrating business into society. *Managerial Auditing Journal, 18* (4): 323-328.

Grant, R. M. (1996). Toward a knowledge-based theory of the organization. *Strategic Management Journal, 17* (Winter Special Issue), 108-122.

Grojer, J. (2001). Intangibles and accounting classifications: In search of a classification strategy. *Accounting Organizations and Society, 26* (7-8): 695-713.

Guthrie, J., Petty, R., Ferrier, F. & Wells, R. (1999). *There is not accounting for intellectual capital in Australia: Review of annual reporting practices and the internal measurement of intangibles within Australian organizations.* Paper presented at the OECD conference in Amsterdam.

Hair, J., Anderson, R., Tatham, R. & Black, W. (1998). *Multivariate data analysis.* Upper Saddle New Jersey, Prentice Hall.

Hall, R. (1992). The strategic analysis of intangible resources. *Strategic Management Journal, 13:* 135-144.

Hambrick, D. C. & Cannella, A. (1993). Relative standing: a framework of understanding departure of acquired executives. *Academy of Management Journal, 36*: 733-762.

Hambrick, D. C. & Mason, P. A. (1984). Upper echelons: the organization as a reflection of its top managers. *Academy of Management Review, 92*: 193-206.

Harvey, M. & Lusch, R. (1997). Protecting the core competencies of a company: Intangible asset security. *European Management Journal. 15* (4): 521-542.

Harvey, M. & Lusch, R. (1999). Balancing the intellectual capital books: Intangible liabilities. *European Management Journal, 17* (1): 85-93.

Hirschey, M & Richardson, V. (2002). Information content of accounting goodwill numbers. *Journal of Accounting and Public Policy, 21*: 173-191.

Huber, G. P. & Power, D. J. (1985). Retrospective reports of strategic level managers: Guidelines for increasing their accuracy. Strategic Management *Journal, 6*: 171-180.

Hunt, J. (1987). Hidden extras—how people get overlooked in takeovers. *Personnel Management,* July: 24-26.

Hurtado, M., Heredia, J. & Calatayud, A. (2005). How the valuation of intangible assets is developing. *International Tax Review.* Dec/Jan: 24-31.

Hymowitz, C. (2005). To rein in CEOs' pay, why not consider outsourcing the post? *Wall Street Journal,* 7-19: B1.

Johanson, U., Eklov, G., Homgren, M. & Martensson, M. (1999). *Human resource costing and accounting versus the BSC. A literature survey of experience and concepts (A report to OECD.)* Stockholm University School of Business (working paper).

Johanson, U., Martensson, M. & Skoog, M. (2001). Mobilizing change through the management control of intangibles. Accounting, Organizations and Society, 26: 715-733.

Jonker, J. & Foster, D. (2002). Stakeholder excellence? Framing the evolution and complexity of a stakeholder perspective of the firm. *Corporate Social Responsibility and Environmental Management 9* (4): 187-195.

Krishnan, H.A., Miller, A. & Judge, W. Q. (1997). Diversification and top management team complementarily: Is performance improved by merging similar or dissimilar teams? *Strategic Management Journal, 18*: 361-374.

Krolick, D. (2005). The relevance of financial statement information for executive performance evaluation: Evidence from choice of bonus plan accounting performance measures. *The International Journal of Accounting, 40*: 115-132.

Krug, J. A. & W. H. Hegarty (1997). Post-acquisition turnover among U.S. top management teams: An analysis of the effects of foreign vs. domestic acquisitions of U.S. targets, *Strategic Management Journal, 18* (8): 667-675.

Lado, A. & M. Wilson (1994) Human resource systems and sustained competitive advantage, *Academy of Management Review, 19*: 699-727.

Lau, C. & Ngo, H. (2001). Organization development and organization performance, *Journal of International Business Studies, 32* (1): 95-114.

Lawn, C., James, M. & Clark, I. (2005). The intangible asset management wave of opportunity in Australia. *International Tax Review,* Dec/Jan, 3-7.

Lee, J. & D. Miller (1999). People matter: Commitment to employees, strategy and performance in Korean organizations', *Strategic Management Journal, 20* (6): 579-592.

Lengnick-Hall, C. & J. Wolff (1999) Similarities and contradictions in the core logic of three strategy research streams, *Strategic Management Journal, 20:* 1109-1132.

Lev, B. (2004) Sharpening the intangibles edge, *Harvard Business Review, 82* (6): 109-116.

Lubatkin, M. (1983). Mergers and the performance of the acquiring organization. *Academy of Management Review, 82*: 281-225

Lubatkin, M. (1987). Mergers, strategy and shareholders value. *Strategic Management Journal, 8*: 39-53.

Lusch, R. & M. Harvey (1994). The case for an off-balance sheet controller. *Sloan Management Review.* 35 (2).

Lusch, R., M. Harvey & C. Speier (1998). ROI3: The building blocks for successful global organizations in the 21st Century, *European Management Journal, 16* (6): 714-728.

Madhok, A. & Osegowitsch (2000). The international biotechnology industry: A dynamic capabilities perspective, *Journal of International Business Studies, 31* (2): 325-336.

Martin, D. & Drews, D. (2005). The impact of SFAS 141 & 142 on intangible asset management. *The Secured Lender.* November/December: 16-22.

Miller, D. & Shamsie, J. (1996). The resource based view of the organization in two environments: The Hollywood film studios from 1936 to 1965. *Academy of Management Journal, 39* (3): 519-543

Mueller, J. (2004). Amortization of certain intangible assets. *Journal of Accountancy. 198* (6): 74-78.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource based views, *Strategic Management Journal, 14*: 179-191.

Pfeffer, J. (1981). *Power in organizations.* Pitman Publish, London, UK.

Planning Review (1994). *How to identify and enhance core competencies, 22* (6), November-December: 24-26.

Porter, M. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: The Free Press.

Power, M. (2001). Imagining, measuring and managing intangibles. *Accounting Organizations and Society, 26* (7-8): 691-693.

Prahalad, C. K. & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review, 68*: 79-91.

Priem, R. L. (1994). Executive judgment, organizational congruence, and organization performance. *Organization Science, 5:* 421-437.

Salancik, G. R. & Pfeffer, J. (1977). Who gets power and how they hold on to it: A strategic contingency model of power. *Organizational Dynamics, 53:* 57-82.

Schoemaker, M. (2003). Identity in flexible organizations: experiences in Dutch organizations. *Creativity and Innovation Management. 12* (4)P: 191-201.

Schoemaker, M. & Janker, J. (2005). Managing intangible assets: An essay on organizing contemporary organizations based upon identity, competencies and networks. *Journal of Management Development, 24* (6): 506-518.

Schweiger, D. M. & DeNisi, A. S. (1991). Communication with employees following a merger: A longitudinal field experiment. *Academy of Management Journal, 34*: 110-135.

Seth, A., Song, K. & Pettit, R. (2000). Synergy, managerialism or hubris? An empirical examination of motives for foreign acquisitions of US organizations. *Journal of International Business Studies, 31* (3): 387-405

Singh, H. & Zollo, M. (1998). The impact of knowledge codification, experience trajectories and integration strategies on the performance of corporate acquisitions. Working Paper, *INSEAD*.

Sharfman, M. (1998). On the Advisability of Using CEOs as the Sole Informant in Strategy Research. *Journal of Managerial Issues, 10* (3): 373-393

Smith, K. G. & Grimm, C. M. (1987). Environmental variation, strategic change and firm performance: A study of railroad deregulation. *Strategic Management Journal, 8*: 363-376.

Teece, D. J., Pisano, G. & Schuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18* (7): 509-533.

Tomaskovic-Devey, D., J. Leiter & S. Thompson (1994). Organizational survey non-responses. *Administrative Science Quarterly, 39*: 439-457.

Ulrich, D. (2004). Capitalizing on capabilities. *Harvard Business Review 82* (6): 119-127.

Valentino, D. (1992). Do more of what you do best. *Across the Board, 29* (II), November, 53-54.

Volberda, H. W. (1996). Toward the flexible form: How to remain vital in hypercompetitive environments. *Organizational Science, 7* (4): 359-375.

Wall Street Journal (2006). Are CEOs worth their weight in gold? January 21, pp. A7.

Wall Street Journal (2005). Nearly 40% of Advest Brokers leave after Merrill acquisition. December 7, pp. C4.

Wall Street Journal, (2002). Arrogance and refusal to work with others led to many failures. December 17, pp. B1.

Wernerfelt, B. (1984). A resource based view of the organization. *Strategic Management Journal, 5*: 171-180.

Willens, R. (1993). Amortization of intangibles: Is a mergers and acquisitions boom imminent? *The CPA Journal, 63* (11): 46-57.

Wright, P. M., McMahan, G. C. & Smart, D. L. (1995). Matches between human resources and strategy among NCAA basketball teams. *International Journal of Human Resource Management, 38* (4): 1052-1074.

Zabala, I., Panadero, G., Gallardo, L., Amate, C., Sanchez-Galindo, M., Tena, I. & Villalba, I. (2005). Corporate reputation in professional service firms: Reputation management based on intellectual capital management. *Corporate Reputation Review, 8* (1): 59-71.