BUNDLING HUMAN CAPITAL WITH ORGANIZATIONAL CONTEXT: THE IMPACT OF INTERNATIONAL ASSIGNMENT EXPERIENCE ON MULTINATIONAL FIRM PERFORMANCE AND CEO PAY

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Abstract

We develop resource- and dynamic capability-based arguments that CEOs with international assignment experience (IAE) create value for the firm and themselves through their control of a valuable, rare, and inimitable resource. Supporting this view, U.S. multinationals performed better with an international assignment-experienced CEO at the helm, especially when such human capital was bundled with other organizational resources and capabilities. Moreover, in highly global firms, CEOs with IAE appropriated a greater proportion of performance in their pay.

The performance of global firms depends on their ability to cope with heterogeneous cultural, institutional, and competitive environments (Ricks, Toyne, & Martinez, 1990), to coordinate geographically dispersed resources (Kim & Mauborgne, 1993; Roth, 1995), and to leverage innovations across national borders (Bartlett & Ghoshal, 1989; Hitt, Hoskisson, & Kim, 1997). Consequently, today's multinationals (MNC) often yield the most complex managerial decision-making environment (Bartlett & Ghoshal, 1992; Sanders & Carpenter, 1998). Such global complexity is likely to make CEOs who have international assignment experience (IAE) invaluable for many MNCs (Maruca, 1994; Gregersen, Morrison & Black, 1998). International assignment experience can provide CEOs with inimitable knowledge, world views, and professional ties that help them to better manage multinationals' far-flung operations (Athanassiou & Nigh, 1999, Lublin, 1996; Maruca, 1994). However, CEOs with IAE are surprisingly rare -- *even among MNCs*. In the resource based view (RBV), a resource that is apparently valuable, rare, and inimitable can contribute to the competitive advantage of those firms possessing it (Barney, 1992; Coff, 1997; Wernerfelt, 1984). Similarly, such advantage is shaped by "the firm's portfolio of difficult-to-trade knowledge assets" (Teece, Pisano & Shuen, 1997: 509). Therefore, the first purpose of this study is to contribute to the mounting body of RBV and dynamic capabilities research by empirically testing the prediction that MNCs will perform best when their CEO has significant international assignment experience.

The resource-based and dynamic capability perspectives also suggest that resources which are intangible, such as those that are socially-complex and embedded in human capital like IAE, are most likely to lead to rent generation when <u>bundled</u> with other resources in a complementary fashion (Barney, 1992; Teece et al, 1997). Indeed, "there is an interaction between the two kinds of resources of a firm -- its personnel and material resources -- which affects the productive services available from each" (Penrose, 1959: 76). Moreover, due to causal ambiguity, path dependencies, and social complexity, competitors should find it harder to duplicate an advantage when it results from a *bundle* of valuable, firm-specific resources (Teece et al, 1997). Therefore, the second purpose of this research is to empirically test the RBV and dynamic capability prediction that characteristics of the MNC will moderate the effects of CEO international assignment experience on firm performance.

Finally, when a firm's ability to generate rents depends on intangible resources embedded in human capital, those who control such resources may be able to appropriate a share of the rents as well. For instance, "it is inappropriate and unrealistic to assume that firms can actually own knowledge-based assets" (Coff, 1999: 121). In this view, certain employees may be better positioned to bargain for a significant portion of the rent based on their key roles in rent generation (Coff, 1999; Henderson & Fredrickson, 1996). Consequently, the third purpose of this research is to empirically explore the RBV and dynamic capability conditions under which CEOs will be paid more when they have international assignment experience. Taken together, this study furthers our understanding of the resource-based and dynamic capabilities perspectives by (1) providing one of the first empirical tests of such perspectives, and (2) determining if CEO-specific human capital affects the generation of MNC rents, the role of resource bundling in rent generation, and who (MNC or CEO?) will be able to appropriate such rents.

THEORY DEVELOPMENT

The resource-based theory of the firm argues that a firm's growth (Penrose, 1959) and competitive advantage (Wernerfelt, 1984) are a function of the unique bundle of *resources* that it possesses and deploys (Barney, 1992). More recently, this perspective has been extended to consider *dynamic capabilities*, a firm's unique "ability to achieve new and innovative forms of competitive advantage given path dependencies and market positions" (Amit & Schoemaker, 1993). While these theories are more similar than different (Teece et al, 1997), we draw on both since the RBV stresses rents arising from scarcity (i.e., Ricardian rents) and the capabilities perspective emphasizes rents arising from market discontinuities (i.e., Schumpeterian rents); indeed, multinationals appear positioned to realize both Ricardian and Schumpeterian rents. Just as importantly, resource and capabilities-based theorizing have long tied organizational outcomes to both human capital resources and capital asset resources (Penrose, 1959; Teece et al, 1997). It also is important to note that Penrose (1959) stressed the role of managerial human capital. However, only recently have a large number of researchers shifted their emphasis to intangible resources, such as those arising from knowledge and experience, as central resources differentiating performance among firms (Barney, 1992; Coff, 1999; Teece et al, 1997).

For instance, executives' work experiences help to form their skill-sets and distinctive world views, along with networks of personal and professional ties. For those reasons, Hambrick and Mason (1984) argued that important organizational outcomes would reflect the "upper echelon" -- as embodied in the characteristics of the firm's top managers. Moreover, executives' skills, views, and networks may create value when they can be applied to the efficient running of the firm, or the management of the external environment. Such value may be amplified in cases where specific types of experience benefit the firm by mitigating a critical contingency it faces (Pfeffer & Salancik, 1978). And because certain experiences often take the form of tacit knowledge (Dyer & Singh, 1998; Polanyi, 1958) or contribute to interpersonal trust (Kim & Mauborgne, 1993; Rousseau & Parks, 1993), they become more difficult to imitate or replace and may be considered valuable in the resource-based and dynamic capabilities views (Barney, 1992; Grant, 1998; Teece et al, 1997). Therefore, while Hambrick and Mason's (1984) upper echelons theory suggests that executives' backgrounds will impact the organization in some way, the resource and capability perspectives may allow us to better predict when such backgrounds can be translated into competitive advantage.

These theories of competitive advantage suggest that *if* a CEO is to add *unique* value, she or he must possess experience that is at once valuable, rare, and difficult to imitate. However, even though many executives bring impressive portfolios of experience to the position of CEO, researchers have long noted the remarkable homogeneity, in terms of experience, of top organizational leaders (Finkelstein & Hambrick, 1996; March & March, 1979). Most top executives of large U.S. multinationals are white males (Finkelstein & Hambrick, 1996), long-tenured (Miller, 1991), graduates of prestigious schools, and have training and work experience in finance or law (Useem & Karabel, 1986). Therefore, while these executives bring an already extensive and valuable set of skills to their firms, there would appear to be little differentiation across firms in their CEOs' portfolios of human capital. It is perhaps for this reason that upper echelons researchers have found a direct link between CEO background and firm performance to be elusive (Finkelstein & Hambrick, 1996).

The following section draws on a variety of literatures which suggest that CEOs with IAE are likely to be a valuable, rare, and inimitable resource. Further treatment of IAE's value, and value creation, are addressed later in the development of hypotheses linking internationally-seasoned CEOs to MNC performance and CEO pay. Indeed, while value creation is left as an empirical question, we believe that the resource and capability-based perspectives provide a compelling basis to predict CEOs' impact on firm performance. Specifically, a two-stage RBV/dynamic capability model of performance will be introduced that distinguishes between (1) firm-level value creation by the CEO and (2) value appropriation by the CEO.

CEOs with International Assignment Experience -- Valuable, Rare, and Inimitable?

Research on top management teams suggests that international assignment experience (defined as living and working in a foreign country for at least one year [Gregersen et al, 1998]) may be one stark exception to the apparent human capital homogeneity seen in today's executive suites. In spite of claims that the upper echelons of U.S. multinationals are "going global" (Lublin, 1996), the biographical records of their CEOs would suggest that few have completed international assignments. Surprisingly, among the largest U.S. MNCs, CEOs with IAE are not common -- less than one in five have over one year of international assignment experience.

Furthermore, the upper echelons perspective supports the notion that IAE will be valuable. For instance, citing studies that showed international diversification to be related to firm performance, Sambharya (1996) found that executives' IAE was positively related to internationalization. Sambharya's (1996) literature review revealed that IAE would likely contribute to firm performance through better (1) management development, (2) coordination and control of international operations, and (3) information coordination and processing between parent and foreign affiliates and among affiliates. In partial support of this contention, Roth

(1995) found that among medium-sized firms in global industries, CEO IAE was positively related to income growth in companies with a high level of international interdependence (i.e., internal coordination needs across borders). Moreover, Whirlpool's David Whitwam has commented that "the person who replaces me as CEO and chairman will need experience managing in a foreign environment" (Maruca, 1994: 142). Therefore, theoretical and anecdotal evidence is emerging to suggest that CEOs with IAE may be valuable for MNCs.

However, if IAE is truly valuable, then why aren't all MNCs rapidly hiring internationally-seasoned CEOs? The resource and dynamic capability-based views suggest three relevant factors that reinforce its rareness and promote its inimitability. First, causal ambiguity may reduce the ready replacement of current CEOs with ones having IAE. While proponents claim IAE is indispensable for today's CEOs (Lublin, 1996; Maruca, 1994), there is little consensus on the actual value of overseas assignments. For instance, a recent study published by the Association of Executive Search Consultants (Executive Advantage, 1998) reported that less than half of the CEOs, HR heads, and "future" CEOs cited international assignment experience as an "absolute prerequisite" for a new CEO. Indeed, critics argue that international assignment experience is only region-specific, and that global complexity can be adequately managed through middle management, expatriates, locals, or international consultants as needed (Lehner, 1996). Such critics further contend that what is truly needed are top executives with intimate knowledge of the firm and its industry, coupled with general expertise in change management, mergers and acquisitions, and leadership (Executive Advantage, 1998). Therefore, one reason for the continued rarity of CEOs with IAE may be the level of causal ambiguity that surrounds the link between international assignment experience and MNC performance.

Second, the social complexity associated with a CEO's IAE may further complicate the ability of competitors to readily understand or acquire it. For example, if CEO international assignment experience is tacit and firm-specific, then such knowledge specificity and time and path dependency may prevent rivals from simply hiring away the CEO (Barney, 1992; Dierickx & Cool, 1989). In this view, the efficacy of a CEO's IAE may be co-dependent upon factors like organizational structure (Ghoshal & Bartlett, 1990; Gupta & Govindarajan, 1991), degree of internal coordination and integration (Amit & Schoemaker, 1993; Roth, 1995; Teece et al, 1997), and the MNC's unique administrative heritage (Bartlett & Ghoshal, 1989; Fladmore-Linquist & Tallman, 1994). Similarly, since CEOs are typically embedded in a socially-complex top management team (TMT), a firm might have to hire away a whole top team to get the IAE knowledge, skills, and networks associated with the CEO (Hambrick & Mason, 1984; Weick & Van Orden, 1990). This would be consistent with the dynamic capabilities view in which managerial tasks can be performed better and quicker when CEOs and TMTs share common routines, logics, and coordinated information search procedures (Teece et al, 1997). However, research on MNCs has shown such social complexity to stretch even farther down into the organization beyond the TMT (Kim & Mauborgne, 1993), which may therefore compound the difficulty of readily imitating the benefits accompanying a CEO with IAE.

Finally, the direct or indirect costs of acquiring and retaining an internationally-seasoned CEO may be prohibitive. For example, the availability of executives having served in substantive overseas assignments appears highly constrained (Lublin, 1996; Ondrack, 1985). In cases where the benefits of a CEO's IAE are transferable to another firm, such rare skills might go to the highest bidders, *including the additional rent appropriated by the CEO* (Coff, 1999). And even though many U.S. multinationals may increasingly view international assignment experience among members of their top team to be desirable (Lublin, 1996), their efforts at repatriating and retaining executives with IAE have been largely unsuccessful. Indeed, up to 20% of U.S. expatriates return early due to adjustment difficulties in the foreign country, and another 20% leave their parent firm within a year of repatriation (Black, Morrison & Gregersen, 1999; Gregersen & Black, 1995). Moreover, managers taking foreign assignments typically run the risk of being "out of sight and out of mind" for corporate advancement, or being pigeon-holed in a foreign subsidiary (Lancaster, 1995). Thus, skilled executives often select themselves out of the overseas assignment pool. As a result of such managerial labor markets, some multinationals are relying more on "local" managers, and less on costly expatriates to manage foreign markets (Gregersen et al, 1998).

In summary, IAE may be valuable but the forces of causal ambiguity, social complexity, and competitive labor markets contribute to both the rarity and inimitability of international assignment experience among CEO candidates. In the resource and dynamic capability-based views, the rareness and inimitability of such experience may lead it to be a valuable source of competitive advantage for multinational firms. However, it remains an empirical question as to whether or not IAE leads to rent generation, and is thus a valuable resource for MNCs and chief executives. Therefore, the potential value-effects of CEO international assignment experience on performance and CEO pay are explored in-depth below.

CEO International Assignment Experience and Firm Performance

If CEOs with international assignment experience are truly valuable, rare, and inimitable, then the resource and dynamic capability perspectives would predict that the resulting value of such experience is likely to be reflected in firm performance. While research on the upper echelons and international business appears consonant with that contention, the empirical findings have been somewhat inconclusive (Roth, 1995; Sambharya, 1996). At a general level, IAE is held to provide executives with a global management skill set by exposing them to different value systems, languages, and institutional environments (Ricks et al, 1990), and it has been theorized to instill "new ways of learning and responding to stimuli because of socio-cultural differences" (Ricks et al, 1990: 220).

Similarly, Edström and Galbraith (1977) noted that managers increased their global networks through their international assignments. In both the resource and capability-based perspectives, such heightened learning abilities and networks are likely to allow firms to better achieve Ricardian rents through internal coordination and integration (Penrose, 1959; Wernerfelt, 1984), and Schumpeterian rents through the reconfiguration and transformation of the firm's asset base in response to environmental changes (Amit & Schoemaker, 1993; Teece, et al, 1997). Consequently, the skill sets, cognitive complexity, and networks resulting from IAE have been argued to provide CEOs with unique and often tacit knowledge to better oversee and transform their MNCs' far-flung operations.

The network benefits of CEO IAE may also contribute to inter and intra-firm reputation and trust, factors respectively associated with firm performance in the capabilities and resource-based views (Barney, 1992; Teece et al, 1997). For instance, recent prescriptions about multinationals emphasize the importance of strategic alliances and inter-subsidiary cooperation (Bartlett & Ghoshal, 1989; Gupta & Govindarajan, 1991). This cooperation is facilitated by contacts and trust between managers of headquarters and overseas operations or strategic partners (Kim & Mauborgne, 1993), and the networks accompanying IAE may contribute to such contacts and trust. International assignments allow executives to live and work long enough in another part of the world that they likely develop an understanding of the relationships among worldwide operations and capabilities (Kobrin, 1988; Lublin, 1996). Moreover, the significant length of expatriate assignments tends to build much stronger bonds of trust among people -- as compared to those resulting from one-week trips to foreign subsidiaries every year (Black et al, 1999; Lublin, 1996). Therefore, IAE may allow CEOs to better realize global inter- and intra-firm exchange and cooperation (Dyer & Singh, 1998), and thereby improve firm performance (Kim & Mauborgne, 1993; Roth, 1995).

If CEO international assignment experience is truly a valuable, rare, and inimitable resource, and the firms possessing it are indeed imbued with a dynamic capability (Teece et al, 1997), then its presence should be reflected in superior MNC performance. This relationship is summarized in the following hypothesis:

H1a: CEO international assignment experience will be positively associated with the performance of U.S. multinationals.

Bundling CEO IAE with Other Resources and Capabilities

Resource and capability-based theorizing suggest that even though the resource itself may be valuable, rare, and inimitable, it will most likely result in competitive advantage when bundled with complementary resources (Amit & Schoemaker, 1993; Barney, 1992; Teece et al, 1997). Indeed, bundling may be particularly pertinent to human capital resources like experience and skills because they are tacit, socially complex, and hard to appropriate (Barney, 1992; Coff, 1997; Penrose, 1959). For this reason, resource-based theorizing stresses wealth creation as the interaction of human capital and other forms of capital (Penrose, 1959: 76); similarly, the dynamic capabilities perspective emphasizes "difficult to trade knowledge assets and assets complementary to them" (Teece et al, 1997: 521). At a fundamental level, the main-effect predicted above (i.e., H1a) is already a bundling hypothesis since it specifies a rare resource (i.e., CEOs with IAE) in the context of U.S. multinational firms -- firms that are already global and have long stressed the importance of international assignment experience for their middle managers (Kobrin, 1988; Lublin, 1996). However, these firms still vary considerably in the degree to which they are “multinational” (Stopford, 1992; Sullivan, 1994). Therefore, in this section we consider the performance consequences of CEO international assignment experience when it is bundled with top-team international assignment experience and MNC global strategic posture.

Top management team international assignment experience. Research concerning the influence of executives’ backgrounds on organizational outcomes suggests that the performance impact of a CEO's background, such as international assignment experience, needs to be considered in the context of the entire top management team (Hambrick & Mason, 1984; Jackson, 1992). In this view, it is important to study the TMT "because the chief executive shares tasks and, to some extent, power with other team members (Hambrick & Mason, 1984: 196). Moreover, Jackson (1992) observed that a particular executive’s experience, even that of a CEO, is most likely to affect outcomes when it is possessed by at least one other member of the TMT. Therefore, as noted earlier, common experiences (i.e., international, functional, industry) often provide a shared basis for communication, build mutual trust, and ultimately enable the top team to evaluate and take strategic actions (Rousseau & Parks, 1993).

When other top-team members have also completed international assignments, the CEO may be better able to communicate, build consensus around, and implement global strategic imperatives (Bartlett & Ghoshal, 1992; Doz & Prahalad, 1981). Indeed, such shared IAE may contribute to what Murtha, Lenway and Bagozzi (1998: 97) termed a "global mindset" -- "the cognitive processes that balance competing country, business, and functional concerns." Greater IAE among top team members may also provide the CEO more degrees of freedom in managing the complexities of global multimarket competition (Bartlett & Ghoshal, 1989; Prahalad & Doz, 1987). Thus the shared understanding and social complexity that accompanies such experience bundling can further enable the CEO to translate her or his international background into superior firm performance. This bundling of CEO and TMT resources and capabilities is summarized by the following hypothesis:

> H1b: The greater the level of TMT international assignment experience (excluding the CEO), the greater will be the positive association between CEO international assignment experience and the performance of U.S. multinationals.

Firm global strategic posture. In addition to IAE among members of the top management team, a MNC's global strategic posture (GSP) may also affect the utility of a CEO's international assignment experience. Global posture refers to the degree to which a firm is dependent on foreign sales and production, and the geographical dispersion of this dependence. While many large U.S. firms are often categorized as "multinational" (Stopford, 1992), their global strategic postures have been shown to vary considerably (Sanders & Carpenter, 1998; Sullivan, 1994). At one end of the spectrum, for example, GSP may consist primarily of export sales, with high sales concentrations to a few, often geographically and culturally proximate countries (i.e., Chrysler before its merger with Daimler Benz). At the other extreme would be a multinational firm with an extensive GSP -- overseas sales *and* production facilities that span the globe, with little concentration or dependence on any one country (i.e., CPC, Inc.).

From the resource-based and dynamic capabilities perspectives, the full potential of a CEO's international experience may be best realized in a firm that already has substantial international resources deployed. This is especially true for the capabilities perspective wherein competitive advantage lies in firms' distinctive abilities to coordinate, combine, and transform firm-specific assets (Teece et al, 1997). For instance, the competitive strengths of MNCs typically lie in their market positions and ability to influence the regulatory environment of foreign competitors (Prahalad & Doz, 1987). Consequently, the CEOs of multinationals with relatively less extensive global strategic postures are considerably more constrained in the range of competitive attacks or retaliatory moves from which they can choose (Prahalad & Doz, 1987).

In contrast, firms with extensive GSPs can undertake the dynamic chess-like global competitive moves and countermoves envisioned by Prahalad and Doz (1987), Bartlett and Ghoshal (1989), and others. In this view, global competition becomes a race to learn how to exploit and leverage new knowledge, and thus to profitably arbitrage knowledge asymmetries. A CEO’s IAE may provide the firm an inside conduit to such knowledge, and perhaps provide the greatest opportunities for leveraging these knowledge asymmetries to their firm's advantage. Similarly, MNCs with extensive global strategic postures offer CEOs the greatest discretion to influence the bottom line (Sanders & Carpenter, 1998). Their CEOs are best able to leverage their understanding of foreign markets and competitors, to coordinate market and subsidiary initiatives, and engage in multi-market competitive contests. This moderating role of GSP on IAE is summarized in the following bundling hypothesis:

> H1c: The more extensive a firm’s global strategic posture, the greater will be the positive association between CEO international assignment experience and the performance of U.S. multinationals.

International Assignment Experience and CEO Pay

Consistent with the development of hypotheses H1a through H1c, RBV and dynamic capabilities research have been concerned primarily with firm performance. However, recent attention to intangible resources, such as those embedded in human capital, has given rise to questions regarding the allocation of rents between the firm and the owners of such capital (Coff, 1999; Grant, 1998). While this emerging view might suggest that CEOs' pay should partly reflect the unique portfolio of human capital that they bring to the firm, there would appear to be relatively few human capital differences upon which boards of directors could justify paying one

CEO more than another (Finkelstein & Hambrick, 1996). One exception, firm tenure, has shown some relation to total CEO pay (Gomez-Mejia & Wiseman, 1997; Harris & Helfat, 1997; Hill & Phan, 1991), and in some cases has been argued to serve as a proxy for the level of experience an executive has with the firm, its strategies, and its industry (Finkelstein & Hambrick, 1996; Pennings, Lee & Van Witteloostuijn, 1998). In contrast, Leonard (1990) found that other human capital factors explained very little variance when predicting executive compensation levels.

With regard to the subject of this study, past executive compensation research has not included international assignment experience as a component of human capital. If IAE is a valuable, rare, and inimitable resource, then the CEOs possessing it may also be able to appropriate a portion of the value that it generates. While the dynamic capabilities perspective has been somewhat silent on this issue, in the resource-based view an executive's ability to appropriate such economic rents is augmented when their skills match organizational routines (Grant, 1998: 132). And given the heightened competition facing U.S. multinationals at home and the pressure to develop market share abroad, international assignment experience may provide CEOs with greater opportunity to bid up the price of their services. Similarly, boards may pay more for a CEO's resume of international assignments because they expect it to result in better international performance.

Such high pay may be designed to compensate CEOs for their ability to manage international complexity (Sanders & Carpenter, 1998) and for accepting its concomitant risks (Ghoshal & Bartlett, 1990; Porter, 1986). And since CEO candidates with IAE are in short supply (Gregersen et al, 1998; Lublin, 1996), high pay may serve as part of the board’s strategy to retain its CEO (Coff, 1997), perhaps in an attempt to avoid losing the top executive who is perceived as uniquely competent at maneuvering through global competition. In the resource-based view, "the closer an organizational capability is identified with the expertise of individuals … the better able are they to appropriate rents" (Grant, 1998: 132). Therefore, as summarized in the following hypothesis, it is predicted that boards will grant CEOs a higher proportion of firm performance, in the form of higher total pay, when they possess international assignment experience.

> H2a: CEO international assignment experience will be positively related to their ability to appropriate a portion of firm performance, in the form of higher total compensation, in U.S. multinationals.

International Assignment Experience, Firm Globalization, and CEO Pay

Although a CEO's international assignment experience may have intrinsic value regardless of the level and scope of a multinational's international activity, the discretion and bargaining power bestowed on them by such experience may again be increased when bundled into firms with extensive global strategic postures. As GSP becomes more extensive, a critical contingency for the firm increasingly becomes the management of the complexity associated with its far-flung operations (Ghoshal & Bartlett, 1990; Sanders & Carpenter, 1998; Weick & Van Orden, 1990). And a lack of international assignment experience is often viewed as a barrier to understanding foreign employees, competitors, and customers (Sambharya, 1996; Tung & Miller, 1990; Yeung & Ready, 1995). Consequently, at high levels of GSP, boards may place greater premiums on IAE as a prerequisite for their CEOs, putting them in a "strong position to appropriate a substantial portion of his or her contribution to the firm's value added" (Grant, 1998: 132).

Extensive GSPs also may result in greater managerial discretion, which in turn has been shown to result in greater total pay (Finkelstein & Boyd, 1998). Thus given the value, rarity, and inimitability of executives having completed international assignments, CEOs with such experience may be best able to leverage its value for personal gain when bundled in firms with extensive GSPs. Again, noting that CEOs' rent appropriation is dependent on firm performance, this interaction is hypothesized as follows:

> H2b: The more extensive a U.S. multinational's global strategic posture, the greater will be the positive association between CEO international assignment experience and total compensation.

METHODS

Sample and Data

Recognizing that "there is no standard definition for the term multinational" (Stopford, 1992: xii), we followed Stopford's (1992) criterion that a U.S. firm is multinational if it reports sales or production in at least three foreign countries. Among the Standard & Poor 500 (1994), 256 firms satisfied Stopford's (1992) criterion as multinational. Sambharya (1996) noted a similar number of multinationals among the Fortune 500. Our collection efforts yielded 245 multinational firms with complete data for our analyses. A means test indicated that the 11 excluded firms were not statistically different from this study's sample of multinationals on the dimensions of total assets, total sales, and return on assets.

Compensation data came from Compustat's ExecuComp service, which extracts compensation data from firm proxy statements. Data regarding the size of the TMT and board were collected from Standard and Poor's Register of Directors and Executives, and Dun's Reference Book of Corporate Managements. Information on CEO and TMT international assignment experience were obtained from self-report data found in Dun's Reference Book on Corporate Managements and biographies published in the Wall Street Journal. Finally, firm financial information came from PC-Compustat, and data on foreign offices came from the Directory of Corporate Affiliations.

The chronology of the data reported in the tables was as follows: independent, moderator, and control variables were measured in 1993 and dependent variables in 1994 through 1996. This chronology provided that CEO international assignment experience preceded firm performance and pay. While no social science research can prove causality, we can at least infer a cause and effect relationship, with our causal variables preceding our effected variables in time -- thus satisfying the first of three causality criteria. The second criterion, covariation, will be satisfied by the significance of the independent variables in our regressions -- consistent with our theory. In answer to the third criterion, we have identified and included those control variables likely to provide alternative explanations if omitted.

Dependent Variables

To test the robustness of support for hypotheses H1a-H1c across both accounting and market measures, *firm performance* was measured as return on assets (ROA) and total stock market returns (SMR). ROA (i.e., net profits divided by total assets) indicates the efficiency with which a firm employs its current asset base, and is especially pertinent to this study since firm internationalization is theoretically associated with the search for economies of scope and scale (Dunning, 1988). The market performance measure, SMR (i.e., percentage change in stock price plus dividend yield), is indicative of how effectively the firm is managing shareholder interests, and the level at which it is providing shareholders an acceptable total stock market return.

To test hypotheses H2a and H2b, *CEO compensation level* was measured as the log of the total of all forms of compensation granted. Long-term forms of compensation (e.g., stock options, restricted stock, and long-term investment plans) were valued at their present value as provided by the company in its proxy statement. With respect to stock options, the SEC allows firms to use one of two methods: the Black-Scholes method, or a more simplistic present value formula provided by the SEC. Research has shown that various option pricing methods produce highly correlated values (e.g., $r > .90$, [Sanders, Davis-Blake & Fredrickson, 1995]); our results were not sensitive to the method used. Because it is important that all data in the analyses follow the same valuation method, and because the majority of firms in this sample adopted the SEC method, we valued all stock options using the latter methodology. The SEC method estimates the potential value of stock options by subtracting the option price from the estimated stock price in ten years and discounting this difference at 5 percent yearly to the present year. The estimated future stock price is the current price per share escalated by 5 percent per year for ten years.

Independent and Moderator Variables

CEO international assignment experience was gauged as the number of years for which the CEO reported working in international assignments through 1993. This measure has been used in prior studies of multinationals and IAE (Sambharya, 1996; Sullivan, 1994). We also experimented with more fine-grained measures that captured breadth, in terms of numbers of countries or length of experience by country; these measures provided no more explanatory power in the models than the simple measure of years. The single measure used here is the most conservative and also provided the largest sample on which to test the theorized relationships.

Top management team international assignment experience is a moderator variable used to test hypothesis H1b, and is a control in the compensation models. This measure was calculated as the years of IAE reported by the TMT, excluding the CEO. While we experimented with differing definitions of the TMT, ranging from all officers listed in the directory (Dun's Reference Book of Corporate Managements) to the four top-paid in addition to the CEO, results were quite similar for the different definitions. The results reported here use all officers over the level of vice president (VP). This definition captured an average top team size of nine executives, ranging from 3 to 24 members (as described in the control variables section below, we controlled for TMT size).

Global strategic posture (GSP) is the second moderator variable in this study (hypotheses H1c and H2b). We measured a firm's 1993 GSP using a variation of Sullivan's (1994) composite measure of firm internationalization. This measure gauges internationalization on three important and theoretically distinct continuous dimensions. The first dimension, *foreign sales*, is calculated as a ratio of foreign sales to total sales and reflects a firm's dependence on sales to foreign markets. The second dimension, *foreign production*, reflects a firm's reliance on owned foreign asset stocks and is measured by foreign assets as a percentage of total assets. The sales and asset dimensions address a firm's dependence on foreign consumer markets and productive resources, respectively. The third dimension, *geographic dispersion*, gauges the firm's number of country subsidiaries as a percentage of the highest number of country subsidiaries represented among the firms in our sample. It provides an indication of the cultural variety associated with the previous two dimensions (Johansen & Vahlne, 1977). Each of the three dimensions ranges from 0 to 1.

Together, the three different variables (*foreign sales, foreign production,* and *geographic dispersion*) were summed to form our composite measure of GSP. Therefore, our composite

GSP measure has a theoretical range of 0 to 3. Consistent with Sullivan (1994), we found that these variables demonstrated high inter-item reliability (alpha = .86 [Nunnally, 1978]), loaded on one factor with a high Eigenvalue and explained variance, and both the component continuous variables and composite continuous measure were normally distributed. While there are multiple possible single-indicator measures of global strategic posture (e.g., foreign sales to total sales, foreign assets to total assets), Sullivan (1994) has shown that these other measures correlate highly among the multinationals in the S&P 500.

Control Variables

Firm size is related to firm performance and to the level of executive compensation (Finkelstein & Hambrick, 1996; Gomez-Mejia & Wiseman, 1997). Thus we controlled for the effects of firm size, measured as the logarithm of its sales. Industry is another important predictor of firm performance (Porter, 1986) and CEO pay (Rajagopalan & Prescott, 1990). We controlled for *industry effects* following the procedure described by Amburgey and Miner (1992: 340). Firms were grouped into eight broad industry categories based on their primary four-digit SIC code, with one group being designated the control group. Results reported below and in the tables incorporate seven industry dummy variables but the coefficients for these dummies are not included in the tables to preserve space.

Prior research has also found that industry globalization is related positively to firm performance (Porter, 1986). Therefore, in models predicting firm performance we controlled for *industry degree of globalization*. We calculated an industry's degree of globalization using the ratio of foreign sales to total sales (e.g., industry foreign sales / industry total sales) at the level of 4-digit SIC codes. However, since each firm typically participates in more than one industry, we then adjusted each firm's score to account for the proportion of a firm's sales associated with each industry in which it participates. Thus we calculated a firm's weighted-average industry degree of globalization as follows: Industry degree of globalization$_a$ = Σ (Sales$_{ia}$/Sales$_a$) * (Foreign Sales$_i$/Sales$_i$), where *a* represents a firm and *i* represents industry segments.

Diversification has also been shown to relate to firm performance (Rumelt, 1974), and to executive compensation (Henderson & Fredrickson, 1996; Hill & Phan, 1991). We therefore controlled for *diversification level* in performance and compensation models by using an entropy measure of diversification (Palepu, 1985), such that Diversification$_a = \Sigma\, P_{ia} \ln(1/P_{ia})$, where P_{ia} is the proportion of a firm *a*'s sales in business segment *i*. Executive stock ownership is also related to firm performance and CEO pay (Westphal & Zajac, 1994). Therefore, we controlled for *CEO stock ownership* using the proportion of total outstanding common shares controlled by the CEO.

Firm complexity arising from high reliance on research and technology has been shown to increase CEO pay (Henderson & Fredrickson, 1996). R&D intensity has also been shown to impact firm performance (Hitt et al, 1997). Consequently, in models predicting MNC performance and CEO compensation level, we control for *R&D intensity* using the ratio of R&D expenses to total sales. *CEO position tenure* is controlled in models predicting pay because CEO tenure has been found to influence compensation (Hill & Phan, 1991). We also controlled for *TMT international assignment experience* in CEO total compensation models to see if CEO pay was dependent on the rarity of IAE in the focal firm. And since the measure of TMT IAE may also be a direct function of *TMT size*, we controlled for this as the number of executives on the top management team in models predicting performance and pay.

Analysis

Since the proposed relationships between CEO IAE and firm performance were recursive, we used ordinary least squares (OLS) multiple regression analysis to estimate models of firm performance. The CEO pay models were estimated using two-stage least squares regression. The two-stage procedure allows us to treat firm performance as an endogenous variable in models of CEO pay. Also, to the extent that the models of CEO pay encompass a larger system of equations in which some variables that predict firm performance might be independently related to pay, OLS regression could yield biased estimates in modeling CEO pay (Johnston & Dinardo, 1997). Two-stage least squares regression corrects for this bias by generating a reduced form estimate of firm performance, and then including the predicted value from this equation as an instrument in a second-stage equation estimating total CEO pay.

RESULTS

Means, standard deviations, and bivariate correlations for all variables used to test the hypotheses are presented in Table 1. It can be seen, for instance, that a CEO with international assignment experience was most likely to be at the helm of MNCs that had extensive global strategic postures. Underlying these data, and supporting our contention that international assignment experience would be rare, only 53 out of 245 firms (or 22 percent) had CEOs with such experience – although *all* the firms in the sample were multinational by Stopford's (1992) definition. *Among* those CEOs with international assignment experience, its mean was 7 years and ranged from 1 to 22 years. Only 11 of these CEOs were foreign nationals. Results were unchanged when firms with non-U.S. CEOs were dropped from the sample. Since nationality had no effect on either performance or compensation, we included those firms in the analyses. The international assignment experience among TMTs ranged from 1 to 31 years, and averaged 9 years. In the entire sample, only 11 percent (or a total of 224 executives) of non-CEO TMT members had served in international assignments.

*** * * * * Insert Table 1 About Here * * * * ***

Given that our dependent variables were continuous, OLS multiple regression was used to test hypotheses H1a through H1c, and two-stage least squares (described above) for hypotheses H2a and H2b. Precautionary analyses for all regressions indicated that outliers were not present in the data-set and therefore do not explain the results presented. Similarly, variable inflation factor (VIF) scores indicated no problems of multi-collinearity. Following Jaccard, Turrisi, and Wan (1990), all interaction variables not specified in main-effect hypotheses were included as controls. The first set of hypotheses (H1a - H1c) predict that CEO international assignment experience will be positively associated with firm performance. The coefficients for the control variables used to test these hypotheses are shown in Table 2 (Models 1 and 6). Consistent with prior research, the control for industry globalization was related positively to firm performance (Porter, 1986). To preserve space, we report one-year lagged models only; again, the coefficients for the seven industry dummy variables are omitted from the tables, but included in the analyses. The import of these latter controls is borne out by the fact that industry membership explained about two-thirds of the control model variance for both performance and pay.

*** * * * * Insert Table 2 About Here * * * * ***

The results presented in Models 2 and 7 are consistent with hypothesis H1a: CEO international assignment experience positively predicted firm performance -- both ROA ($p<.05$) and SMR ($p<.10$). Moreover, the interactions between CEO international assignment experience and TMT international assignment experience (Hypothesis H1b) were also significant (Models 3 and 8) along with the increase in R-square. In addition, interactions between CEO IAE and GSP (Hypothesis H1c) were significant for the models predicting firm performance (Models 4 and 9), but the variance explained only increased in model 4. Following the procedure outlined by Jaccard and company (1990), decomposition of these interaction terms revealed that the simple-effect of CEO international assignment experience on firm performance was an increasing, positive function of TMT international assignment experience and a firm's global strategic posture. Thus, hypothesis H1b was supported and H1c received partial support (i.e., ROA).

To further test the robustness of the performance hypotheses we averaged ROA and SMR over the two (i.e., 1994 and 1995) and three-year periods (i.e., 1994, 1995 and 1996) following the observation of CEO international assignment experience (i.e., 1993). The analyses revealed that the main and interaction effects of CEO IAE on ROA persisted over the two and three-year measures of ROA but that the variance explained decreased over time. No effects were found on the longer-term measures of SMR, which is not surprising given even somewhat efficient markets.

*** * * * * Insert Table 3 About Here * * * * ***

The results of the tests using two-stage least squares of hypotheses H2a and H2b, predicting CEO total compensation, are shown in Table 3. The control coefficients predicting total compensation are presented in Model 1. For instance, consistent with prior compensation research, CEO pay is largely a function of firm size (Gomez-Mejia & Wiseman, 1997). In contrast, total CEO compensation is related negatively to TMT international assignment experience. And while the coefficient for CEO international assignment experience was not significant (Model 2), separate analyses revealed it to be positive and significant when the control for TMT IAE was removed. Thus in accounting for the presence of IAE among members of the top management team, we found no support for our main-effect hypothesis (H2a) that internationally-seasoned CEOs would be able to appropriate a greater share of firm performance, in the form of higher total pay.

Hypothesis H2b predicts that the effect of CEO international assignment experience on compensation will be moderated by GSP. As Model 3 shows, the coefficient for the multiplicative interaction between IAE and GSP was positive, thus suggesting support for hypothesis H2b. Specifically, the greater the level of firm GSP, the stronger the positive relationship between a CEO's international assignment experience and total pay -- even when controlling for TMT IAE. Again following Jaccard et al. (1990), when we decomposed the significant interaction into its simple effects, we found that the slope of CEO IAE was significantly more positive ($p < .05$, adjusted Bonferoni procedure) at high moderator levels (i.e., extensive GSP) than at low moderator levels. Therefore, CEO international assignment experience had little to no effect on CEO pay at low levels of GSP, but rather strong, positive effects on pay in MNCs with extensive global postures.

We also examined the lag structure of the CEO pay models to determine if alternative lag structures for the dependent variable would provide a superior fit to the data. Results from a polynomially distributed lag regression based on an Almon lag function supported our use of a single-year lag. Supplemental analyses with a two-year lag yielded significant results similar to those reported in the paper; no significant results with a three-year lag, and no alternative lag structure provided a better fitting model.

DISCUSSION

This research explored the effects of CEO international assignment experience on firm performance and CEO pay in large U.S. multinationals. Drawing on the resource-based theory of the firm and the dynamic capabilities perspective, we argued that if such experience was a valuable, rare, and inimitable resource, then its value would most likely be revealed in situations where it could be bundled with other complementary strategic resources. We also argued that if international assignment experience is embedded in human capital, then a powerful stakeholder like the CEO might well be able to appropriate a portion of the economic rents arising from it. Taken together, the results presented above suggest support for our resource and capability-based arguments and shed light on some of the conditions surrounding rent generation and rent appropriation in U.S. multinationals.

Implications of Results

Specifically, we proposed that although Hambrick and Mason's (1984) upper echelons theory suggests that executives' backgrounds will impact their organizations in some way, the resource and capability perspectives would allow us to better predict when such backgrounds could be translated into actual competitive advantage. Indeed, if CEOs face competitive markets, but possess only generic, undifferentiated portfolios of skills and capabilities, then there is little reason to expect CEO-based differences in accounting or stock market performance. Perhaps for this reason, upper echelons researchers have found the link between executive characteristics and firm performance to be elusive (Finkelstein & Hambrick, 1996). In contrast, we argued that MNCs would reap value from CEO international assignment experience if it were somewhat uncommon and bundled with complementary resources. Such arguments are consistent with the resource and capability-based notions of Amit and Schoemaker (1993), Dierickx and Cool (1989), and others regarding the performance implications of imperfections in strategic factor markets (i.e., rareness and inimitability of a valuable resource like IAE) and resource complementarity (i.e., IAE bundling). As initial support for our resource and dynamic capabilities-based theorizing, CEO international assignment experience showed a positive and consistent relationship with both accounting and market measures of firm performance; it also was found to be relatively rare. Moreover, the relationships between IAE and MNC performance were strongest when such CEO experience was bundled with TMT international assignment experience and firms with extensive GSPs. Therefore, this study provides preliminary empirical support for previously untested resource and capability-based theories on the role of human capital in competitive advantage.

Similarly, we argued that CEOs with IAE would be able to appropriate a portion of the higher rents they created for MNCs. Since multinationals with CEO IAE performed better than those without it, CEOs were evidently unable to appropriate all of their value-added. However, the relationship between international assignment experience and CEO pay was indeed positive, but contingent on being deployed in MNCs that managed extensive global strategic postures. As we noted earlier, international complexity is often cited as one of the pivotal critical contingencies facing multinationals (Prahalad & Doz, 1987; Sanders & Carpenter, 1998). Thus it stands to reason that the most global MNCs should place the greatest value on having a CEO with international assignment experience. Such experience helps the CEO manage international complexity and is reflected in the form of higher firm performance. An emerging governance perspective holds that CEOs are compensated for the level of complexity they must manage (Henderson & Fredrickson, 1996; Sanders & Carpenter, 1998). While that perspective has emphasized environmental and organizational determinants of pay (i.e., environmental and task complexity), our study suggests that CEOs themselves possess varying amounts of the experience requisite to managing such complexity effectively. Consequently, IAE was also shown to be one of the mechanisms allowing CEOs to appropriate a share of firm performance for themselves, in the form of higher total pay.

Future Research

In addition to the questions this study answers, the results suggest several new directions for future research. For instance, why do CEOs with international assignment experience appear not to profit, in terms of their total pay, when they manage firms with less extensive global strategic postures? One explanation may lie in the observation that foreign assignments are often a risky career move for both executives and their firms, and that the time spent overseas has the concomitant cost of less political clout back at headquarters (Lancaster, 1995) -- even for the executive eventually chosen as CEO. Researchers consistently find that in most U.S. firms, expatriates are considered "out of sight, out of mind" during international assignments (Gregersen & Black, 1995). Further, when firms have a low financial stake in global markets (i.e., low GSPs), there is greater ambiguity surrounding the link between IAE and firm profitability, which in turn translates into low international "expert" power for the CEO. Similarly, their boards may simply not understand or appreciate the value of IAE (i.e., the causal ambiguity problem), and thereby further reinforce its inimitability and rareness. Therefore, future research should seek to untangle this web to explain the effects of CEO IAE on CEO compensation in low-GSP firms.

A second question relates to the role of corporate governance in the degree to which executives leverage their human capital for firm and personal gain. On the one hand, CEOs that serve both as chief executive and board chair, or who have stacked the board with insiders or friendly outsiders may be better positioned to translate IAE into higher pay. On the other hand, CEOs may be *less* able to negotiate higher IAE-based compensation if board members have international assignment experience or ties to firms with related global strategies (Carpenter & Westphal, 1999). From a dynamic capabilities perspective, these latter board characteristics are possible *substitutes* for CEO IAE, and any resource becomes less valuable when firms "discover alternative ways of achieving the same functionality" (Teece et al, 1997; 525). The fact that CEOs' IAE-based pay was affected negatively by TMT international assignment experience (Table 3) further suggests that the strategic value of human capital, in terms of individual bargaining power, may decline to the extent that there are readily-accessible, within-firm substitutes (Coff, 1999).

With regard to firm performance, we argued that CEOs with IAE would be paid more, in part, because they could deliver greater MNC performance. Given the social complexity surrounding IAE, there is reason to expect that such pay practices should also extend to members of the TMT. However, CEOs of U.S. MNCs are generally paid much more than members of their management team (Finkelstein & Hambrick, 1996). This is notable since the notion of social complexity assumes that TMTs are behaviorally integrated (i.e., actually function as a "team"), and large pay gaps may damage executives' perceptions of procedural and distributive justice (Kim & Mauborgne, 1993). In turn, this fragments the TMT. Conversely, TMT pay homogeneity (including the CEO) may foster a behaviorally integrated team. Such behavioral dynamics may provide another partial explanation as to why TMT IAE was related negatively to MNC performance when controlling for its positive and significant interaction with CEO IAE (Table 2, Models 5 and 10). Remember that since the negative effects appear only in the interaction models they are conditional relationships, and thus reflect the effect of TMT IAE on performance *only when CEO IAE equals zero* (Jaccard et al, 1990: 26). Thus, if a CEO is not compensated for IAE, particularly because they do not have it, then the value of TMT member IAE may go unrecognized (i.e., uncompensated) as well. Consequently, the top team may become behaviorally *disintegrated* and its fragmented international expertise — absent similar expertise in its CEO — begins to hinder MNC performance. In combination, the above speculation suggests the clear need to further research the complex interrelationships among corporate governance practices, human capital, and MNC performance.

A fourth research question concerns CEO succession planning. If CEO international assignment experience has value, then a large sample survey or field study should explore why more U.S. multinational firms aren’t able to bring such experience to the executive suite. One answer to this paradox might lie in the social structure of some firms, suggesting a “glass-ceiling” effect on international assignment experience. For instance, Ullmann and Black (1998) found IAE least likely when the new CEO followed a powerful CEO who lacked a resume of international assignments themselves. They also reported that new CEOs were most likely to have IAE when the departing CEO had also completed international assignments. Consequently, not only may a CEO's international assignment experience be a valuable resource stock (Dierickx & Cool, 1989), it may also signal the firm's unique capability to promote a pool of viable CEO candidates with such experience, thus yielding a self-renewing source of competitive advantage. Such an interpretation would be consistent with a dynamic capability perspective wherein the basis for competitive advantage sometimes shifts from simple competition for resources in factor markets, to competition in resource *accumulation* (Dierickx & Cool, 1989; Teece et al, 1997).

As a final irony and research direction, the current rewards bestowed on multinationals as a result of global CEOs may also sow the seeds which eventually undermine its value-creation opportunities. For instance, there is anecdotal evidence that many firms *intend* to take greater strides to ensure that their next CEO has an international resume (Lublin, 1996; Maruca, 1994; Parker-Pope, 1997; Quickel, 1994). From a dynamic capabilities perspective, "it is the ease and speed of imitation that determines the sustainability of competitive advantage" (Teece et al, 1997: 526). While such change may take several decades (Miller, 1991), it clearly has long-term implications for the rareness and inimitability of IAE in the upper echelon. Moreover, escalating pay for internationally-seasoned CEOs may impede a firm's capacity to "replicate" this valuable capability over time (Teece et al, 1997), and further dilute the ability of this human capital resource to benefit bottom-line performance. Indeed, such resource and capability dynamics could help to explain why IAE was reflected greater in accounting profits, and only in near-term stock market performance. The stock market may well have already incorporated CEO international assignment experience into its valuation of companies' competitive advantage. Future research should consider the sustainability of competitive advantage when it is based in human capital.

Practical Implications

A practical implication of this study concerns the transferability of resources across and within firms, especially when a resource or capability like international assignment experience is socially complex and embedded in human capital. If resources deliver the most value and competitive advantage when bundled with other strategic resources, then additional critical strategy variables like strategy type (i.e., multi-domestic versus global) and mode of entry (i.e., direct investment versus joint venture) may need to be taken into account. Moreover, it is unlikely that firms will benefit from CEOs who -- though they may have established strong track records elsewhere -- are ill-suited to their specific resource base. In partial support of the above view, Roth (1995) found that CEO international assignment experience related positively to firms' income growth in highly interdependent organizations (i.e., global strategies), but negatively in the case of low interdependence (i.e., multi-domestic strategies). This suggests that steps must be taken to assess resource "fit" beforehand, and proactively identify the critical human capital resources that constitute essential inputs into resource bundling. Following the above scenario, for instance, firms wishing to exploit an extensive but floundering portfolio of international operations may be best advised to appoint an internationally-seasoned CEO, and grant that CEO significant discretion in appointing other top executives with similar international assignment experience.

Purely anecdotal examples of the above contention are provided by Campbell's Soup Company and Whirlpool -- two of the sampled firms in this study that demonstrated above-average GSPs, and competed in global industries. In 1994, Campbell's shattered its international glass ceiling by hiring a globally-seasoned CEO, who in turn acted quickly to shore up its "dearth of international executive talent, and its mindless mishmash of global businesses" (Quickel, 1994: 23). Arguably faced with a similar situation in 1994, Whirlpool added international depth to its top management team, but failed to appoint a CEO with international experience (Feder, 1997; Maruca, 1994). Consistent with our findings, today Campbell's has been heralded as one of the world's best run food companies (Business Week, 1997). In contrast, Whirlpool has become the "goat" of Wall Street, largely due to its failure to manage its extensive non-U.S. operations effectively (Feder, 1997).

Even though the value of CEO international assignment experience was shown in this study, the pool of CEO candidates completing international assignments remains small. Slightly over 20 percent of the CEOs studied here had some IAE, and only 11 percent of their TMT colleagues had similar qualifications. These statistics are especially vexing in light of our finding that CEO international assignment experience had its greatest effect for firms with other globally-seasoned executives on the TMT. While some companies are increasing the number of expatriates sent abroad, the overall number as a percentage of the total managerial population remains minuscule -- less than 15 percent according to Black, Gregersen, Mendenhall, and Stroh (1999). Just as problematic for U.S. firms is their continued inability to successfully retain executives returning from international assignments (Gregersen & Black, 1995) or convince successful foreign executives to relocate to the U.S. corporate headquarters (Lublin, 1996). These trends suggest that the dilemmas associated with the dearth of IAE in the executive suite are not likely to be remedied anytime soon without long-term investments to build tomorrow's top management team (Gregersen et al, 1998).

Limitations

Our findings, their interpretation, and subsequent discussion must be considered in the context of the study’s limitations. For example, although our empirical results supported many of our hypotheses, CEO IAE did not explain a tremendous amount of additional variance in our models of MNC performance or CEO pay. Thus alternative methodologies are needed to better understand the underlying behavioral and cognitive dynamics of these predictions (e.g., Kim & Mauborgne, 1993). Additionally, this study has relied on archival data which only provides a rough indication of underlying processes and relationships. While it is appropriate to measure objective levels of executive compensation, as Gomez-Mejia and Wiseman (1997) have observed, such data may not adequately capture the nuances underlying executive compensation decisions and its positive or negative repercussions for the firm.

Another limitation is suggested by our sampling of U.S. multinational firms. From a practical standpoint, we quickly discovered that reliable demographic and compensation data, like those needed in this study and in other upper echelons and governance research, are not typically available for non-U.S. firms (even those in Western Europe). Regardless, the study begs the question whether the relationships reported here generalize to firms headquartered outside the United States. On one level, for instance, international assignment experience may be more common among European or Asian CEOs, and therefore less rare from a resource and capabilities-based perspective. Also, although all firms have some sort of leadership structure, comparative international research suggests that a "top-down" view is particularly applicable to U.S. and European firms (Schneider & De Meyer, 1991). Such a view holds that a firm's top executives compose its dominant coalition, and are the information-processing and decision-making center of the organization in its relationship with the environment. Thus the results obtained here may not apply to Japan or Korea (Wiersema & Bird, 1993), but may apply to Europe (Pennings, 1993). And while our broader theory has face validity for U.S. and some non-U.S. firms, we chose to focus on large U.S. multinationals for this study. Future work should examine its transferability to other national contexts.

Conclusion

The results of this research have important implications for management theory and practice. Specifically, this study of CEO international assignment experience in U.S. multinationals provides a novel context in which to empirically examine the role of human capital in the resource-based and dynamic capabilities perspectives of competitive advantage. It similarly highlights the tangible benefits of CEO international assignment experience for some firms that seek to improve their financial performance. Moreover, these findings also show how knowledge and human capital-based resources may create an opportunity for key stakeholders themselves to appropriate a portion of the economic rents generated by the multinational firm. It is hoped that the framework and results presented here stimulate new resource and dynamic capabilities-based research on the determinants of international strategy and performance, as well as the conditions under which their presence is most likely to be revealed in firm performance and executive pay.

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Table 1
Descriptive Statistics and Correlations[a]

	Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12
1	ROA	6.36	5.90												
2	SMR	3.26	19.13	.22											
3	CEO total compensation (log)	7.78	.88	-.05	.06										
4	CEO intl. assignment experience	1.78	3.94	.11	.10	-.03									
5	Avg. TMT intl. assignment exp.	8.70	16.10	.02	.12	.08	.23								
6	Firm GSP	.71	.51	-.04	.23	.11	.12	.51							
7	Industry degree of globalization	.15	.09	.17	.31	-.05	.11	.24	.43						
8	Firm sales (log)	8.49	1.08	-.22	.03	.43	.07	.27	.18	-.06					
9	Diversification	.56	.51	-.17	-.03	.17	.08	.13	.13	.09	.24				
10	CEO stock ownership (%)	.34	.91	.26	.14	-.32	-.11	.09	-.17	-.06	-.20	-.14			
11	R&D intensity	.03	.05	.29	.24	-.04	.06	.12	.24	.29	-.21	-.28	-.04		
12	CEO position tenure	7.28	4.58	.12	.12	-.10	-.09	-.12	-.06	-.07	-.05	.07	.19	-.11	
13	TMT size	5.48	2.21	.05	.11	.06	.09	.11	.04	-.08	.18	.14	-.08	.01	.01

[a] n=245. Correlations greater than .12 are significant at p<.05, those greater than .16 are significant at p<.01.

Table 2
CEO International Experience and Firm Performance (ROA and SMR)[a]

	ROA					SMR				
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**	**Model 8**	**Model 9**	**Model 10**
Firm sales	-.98**	-1.07**	-.93**	-.93**	-.85**	.36	.13	.61	.37	.73
	(.33)	(.33)	(.34)	(.33)	(.33)	(1.22)	(1.23)	(1.24)	(1.25)	(1.24)
Diversification level	.19	.15	-.06	.07	-.10	-.38	-.48	-1.27	-.65	-1.32
	(.66)	(.66)	(.66)	(.66)	(.66)	(2.47)	(2.47)	(2.46)	(2.46)	(2.46)
Industry globalization	10.95*	10.30*	13.78*	14.58**	16.73**	65.21**	63.51**	76.08***	71.26**	80.13***
	(5.37)	(5.36)	(5.49)	(5.53)	(5.61)	(19.82)	(19.85)	(20.34)	(20.74)	(20.98)
CEO stock ownership	.08**	.08**	.09***	.09**	.09***	.02**	.02**	.02**	.02**	.02**
	(.02)	(.02)	(.02)	(.02)	(.02)	(.01)	(.01)	(.01)	(.01)	(.01)
R&D Intensity	21.84*	21.72*	19.74*	20.35*	18.97*	-21.77	-22.09	-29.21	-24.55	-30.27
	(9.54)	(9.49)	(9.43)	(9.39)	(9.35)	(35.21)	(35.16)	(34.93)	(35.17)	(34.98)
TMT size	.33*	.32*	.33*	.36**	.36**	1.01*	.98†	1.03†	1.06*	1.07*
	(.14)	(.14)	(.14)	(.14)	(.14)	(.52)	(.52)	(.52)	(.52)	(.52)
TMT international experience	-.02	-.02	-.05*	-.04	-.06*	-.08	-.09	-.21*	-.12	-.22*
	(.02)	(.02)	(.03)	(.02)	(.03)	(.08)	(.08)	(.10)	(.09)	(.10)
Firm GSP	-1.41†	-1.43†	-1.21	-1.21	-1.06	5.06†	4.99†	5.81*	5.40†	6.01*
	(.77)	(.77)	(.76)	(.77)	(.76)	(2.85)	(2.85)	(2.84)	(2.86)	(2.85)
CEO international assignment experience (H1a)		.17*	.10	.04	.01		.46†	.21	.20	.07
		(.09)	(.09)	(.10)	(.10)		(.34)	(.36)	(.39)	(.39)
X TMT international assignment experience (H1b)			.01**		.01*			.04**		.04*
			(.005)		(.005)			(.02)		(.02)
X Firm GSP (H1c)				.57**	.48*				1.03†	.63
				(.22)	(.22)				(.81)	(.83)
Adjusted R-square	.31***	.32***	.34***	.34***	.35***	.23***	.24***	.25***	.24***	.25***
Increase in Adjusted R-square		.01**	.03***	.03***	.04***		.01*	.02**	.01*	.02**
df	221	220	219	219	218	221	220	219	219	218

[a]Unstandardized coefficients. Standard errors in parentheses. Two-tailed tests for all coefficients except theorized effects, which are one-tailed. Industry dummy variables are not shown in order to conserve space. †p<.10,*p<.05, **p<.01, ***p<.001

Table 3
CEO International Experience and Total Compensation Level[a]

	Model 1	Model 2	Model 3
Firm sales	.27***	.28***	.28***
	(.04)	(.04)	(.04)
Diversification level	.10	.10	.10
	(.08)	(.08)	(.08)
CEO stock ownership	.03	.03	-.03
	(.03)	(.03)	(.03)
R&D intensity	2.55*	2.50*	2.83*
	(1.30)	(1.30)	(1.32)
CEO position tenure	.04	-.00	-.00
	(.08)	(.01)	(.01)
TMT international assignment	-.01**	-.01**	-.01**
Experience	(.003)	(.003)	(.003)
TMT size	.004	.003	.01
	(.02)	(.02)	(.01)
ROA	-.01	-.01	-.01
	(.02)	(.02)	(.02)
Firm GSP	.20**	.20**	.22**
	(.09)	(.09)	(.09)
CEO international assignment		-.01	-.02
Experience (H2a)		(.01)	(.01)
X Firm GSP (H2b)			.04*
			(.02)
Adjusted R-square	.25***	.25***	.26***
Increase in Adjusted R-square		.00	.01*
df	220	219	218

[a]Unstandardized coefficients. Standard errors in parentheses. Two-tailed tests for all coefficients except theorized effects, which are one-tailed. Industry dummy variables are not shown in order to conserve space.
†p<.10, *p<.05, **p<.01, ***p<.001

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