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Expatriate Return on Investment

A Definition and Antecedents

Abstract: *Expatriate return on investment (ROI) is undoubtedly an important topic, as evidenced by the considerable efforts of multinational corporations (MNCs) to find cost-reducing alternatives to long-term international assignments. Yet no studies exist examining how expatriate ROI may be calculated and what factors may increase or decrease expatriate ROI for the firm. The purpose of this article is to advance our understanding of expatriate ROI by examining the following: (1) What is expatriate ROI, and how can it be defined, and (2) What are the antecedents of expatriate ROI in terms of the human resource (HR) activities that would increase or decrease ROI. In addressing the research questions, the article formulates hypotheses to guide future research to develop an understanding of expatriate ROI. It does so by adopting a multidisciplinary approach and considering the context of an assignment's purpose. The article covers the following: (1) a proposed definition of expatriate ROI, (2) the importance of an effective system of HR activities and its expected impact on ROI, (3) factors that should be considered in order to improve the accuracy of ROI calculations, and (4) why "one best" ROI formula may not result in a meaningful rate of return. It is intended that the findings of this article will enable scholars and practitioners to have a framework by which to advance research in this important area.*

The costs associated with a long-term international assignment, defined as the relocation of an employee abroad by a firm for a year or more (Boyacigiller 2000;

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Cendant 2002, 2004; Kobrin 1988; KPMG International 2003; Mercer Human Resource Consulting 2003), are high. Some evidence suggests that the costs exceed $1 million per assignee and per assignment, and that the total cost to U.S. multinational corporations (MNCs) is about $75 billion a year (Copeland and Griggs 1985; Sheridan 1998). In spite of the costs, a recent industry survey indicated that it is possible that long-term international assignments provide little return on investment (ROI) (GMAC, NFTC, and SHRM 2002). As Black, Gregersen, Mendenhall, and Stroh said: "An international assignment is the single most powerful experience shaping the perspective and capabilities of effective global leaders. It also happens to be the single most expensive per-person investment that a company makes in globalizing their people. It is unfortunate that most firms are getting anemic returns on this substantial investment" (1999, 2).

Understanding how to obtain a ROI from long-term assignments is important. The reporting of expatriate assignment failures, with 44 percent of MNCs reporting failures in the Asia-Pacific region and 63 percent in Europe (Cendant 2001), seems to indicate that the direct and nondirect costs associated with expatriation are substantial. Yet, industry surveys show that expatriate ROI is not only poorly calculated among MNCs, but it is also not widely used as a tool to reduce expatriate costs (GMAC et al. 2002, 2004). For example, only 30 percent of respondents in the GMAC 2002 survey rated their expatriate ROI as "good" or "excellent," with only 9 percent indicating they had specific programs in place to improve it. In fact, 70 percent of the respondents rated their ROI as average, fair, or poor. Other industry surveys show that to avoid the costs of long-term assignments, MNCs use a range of alternatives, including virtual assignments and teleworking, short-term assignments, business trips, cross-border commuting, frequent flying, and host-country nationals (HCNs) (Cendant 2002; GMAC et al. 2002, 2004; KPMG International 2003; PricewaterhouseCoopers 2001, 2002). Yet, despite the costs, many MNCs continue to use long-term assignments (Cendant 2004; Mercer Human Resource Consulting 2003; PricewaterhouseCoopers 2002), even when cost-effective alternatives are available. This is because the costs associated with expatriation are only one of several factors that are considered when approving international assignments (KPMG International 2004). Determining a ROI is, therefore, necessary to justify the continued use of these assignments.

Despite the importance of obtaining a ROI from long-term assignments, electronic searches (e.g., of Business Premier, PsycInfo, JSTOR, Sociological Abstracts) reveal no published empirical studies examining expatriates' ROI in the academic literature. Only two studies, both surveys by consulting companies, ask HR managers whether their companies estimate expatriates' ROI and what HR practices may increase it (GMAC et al. 2004; KPMG International 2003). Consequently, a theoretical foundation does not yet exist that explains what a ROI means or what factors would increase it or decrease it. Whereas there are definitions of ROI from other disciplines (e.g., accounting) that can be considered, they focus only on quantitative estimates that we believe to be inadequate for the study of expatriates'

ROI, and that we will discuss later in this article. Furthermore, although some past studies have empirically examined the outcomes of some relevant individual HR activities associated with expatriation, including (1) expatriates' premature return from the assignment (Tung 1981, 1987), (2) labor turnover rates from repatriation (Stroh 1995), and (3) expatriate job performance (Caligiuri 1997), the nature and meaning of expatriate ROI still remains unclear. Past studies have investigated the link of individual HR activities in relation to the costs and benefits of long-term assignments but not the system of HR activities that may influence it. For example, we believe that expatriate ROI should not simply consider whether a particular indicator (e.g., expatriate performance) is high or low, but whether the benefits (of which performance is one, among others) exceed the costs (of which premature return and labor turnover from repatriation are costs, among others). Yet, to the authors' knowledge, no empirical studies have examined the influence of HR activities as a system of activities that increase or decrease expatriate ROI.

Based on the shortcomings of the literature, the purpose of this article is to address the following research questions: (1) *What is expatriate ROI, and how can it be defined?* (2) *What are the antecedents of expatriate ROI in terms of the HR activities that would increase or decrease ROI?* In answering these research questions the article develops hypotheses as it proceeds to guide future research.

Developing a definition of expatriate ROI

Despite the importance of expatriate ROI, definitions of the term are difficult to obtain. We, therefore, borrow concepts and theoretical foundations from other disciplines, such as accounting and economics, for explanation in order to address the first research question.

Definition of key terms

Return on investment is an accounting term. In its simplest form, Flamholtz (1985) defines ROI as a financial ratio that expresses profit in direct relation to investment. Schachner (1973) further defines ROI as a profitability equation that may be used to calculate past performance (e.g., earnings) or future expectations (e.g., profitability of a proposed investment). However, scholars in accounting and economic theory (Abdallah and Keller 1985; Brief and Lawson 1992; Laitinen 2003; Spencer 1999) have cast doubts on the appropriateness of using only traditional accounting methods in determining ROI, because accounting measures indicate only past or future *financial* performance (defined as lagging or leading indicators of financial profitability) to the exclusion of *nonfinancial* performance indicators.

In the economics literature, ROI is defined within the context of economic profit (EP) (Canibano, Garcia-Ayuso, and Sanchez 2000; Mills, Rowbotham, and Robertson 1998). EP combines a value-based approach to measure both past (lagging) and future (leading) returns by including *financial* and *nonfinancial* data in the ROI calculation. EP is most commonly used in the economic equations of *shareholder value analysis* (SVA) (Rappaport 1981) and *economic value added* (EVA) (Stewart 1991). Both SVA and EVA calculate ROI from the perspective of overall value*,* where value is defined in terms of both financial and nonfinancial gains and losses. The economic perspective of value in ROI is consistent with the argument that an approach to expatriate ROI based on financial and nonfinancial values can potentially improve the accuracy and usefulness of the calculation. This is because “leading indicators” of value (e.g., establishing new corporate structures in subsidiary offices or developing global leadership talent) can be related to increases and decreases in ROI.

In terms of defining expatriate ROI from industry surveys, the GMAC (2001) survey concluded that, at that time, there was no universally understood definition of the term. In 2002, the same survey defined expatriate ROI as the “accomplishment of the assignment objectives at the expected cost” (GMAC et al. 2002, 55). Yet in the GMAC 2004 Survey only 10 percent of respondents agreed that they used this definition to measure the ROI of their international assignments. The definition is considered inadequate in comparison to definitions given by scholars in related fields (Canibano et al. 2000; Mills et al. 1998). As Boudreau and Ramstad (1997) asserted, the definition of expatriate costs needs to be more fully explained in terms of both the financial and nonfinancial gains and losses associated with HR investments. A part of any definition of expatriate ROI is whether the benefit to the MNC outweighs the costs of the international assignment (Kobrin 1988; Sheridan 1998).

The costs and benefits of long-term assignments

From the literature (Downes and Thomas 1999; Dyer and Reeves 1995; Kobrin 1988), we conclude that a definition of expatriate ROI needs to include an estimation of both the financial and nonfinancial costs and benefits of a specific assignment. Such a definition would then enable practitioners to improve their understanding of what would increase, or conversely, decrease ROI, because, as Danfy (1975) argued, the importance of an ROI calculation is not just in determining the rate of return, but also in understanding why rates of return increase and decrease. In order to understand these costs and benefits, we adopt Williamson’s (1985) transaction cost theory that focuses on the combination of (1) transactions, (2) costs arising from transactions, and (3) the minimization of transaction costs through efficient control structures. We suggest that there are transaction costs arising over the life of the long-term assignment that may reduce ROI (Masten, Meehan, and Snyder 1999). For example, in terms of financial costs and benefits, the U.S.-based National Foreign Trade Council (Sheridan 1998) estimated that assignment costs can exceed $1 million per expatriate per assignment, based on a three-year assignment—including $100,000 a year in salary costs, and up to

$250,000 per year in assignment-related overheads. Not surprisingly, high failure rates, which can be defined as premature return, the inability to achieve assignment objectives, or host-country problems, only exacerbate the financial costs (Cendant 2001; Tung 1981). Furthermore, although Benito, Tomassen, Bonache-Perez, and Pla-Barber (2003) did not estimate the ROI of an international assignment, they reported that the financial costs associated with the premature return of an expatriate could result in an increase in relocation expenses associated with repatriating the assignee and finding a replacement to send to the host location. Overall, Benito et al. (2003) argued that an MNC's ability to manage an expatriate's career path (or "manage the transaction over the life of the contractual relationship"), in terms of developing management experience, could in the long term reduce financial costs and increase the benefits of international assignments.

There are substantial nonfinancial costs and benefits with respect to long-term assignments that also need to be considered when calculating expatriate ROI. With respect to nonfinancial costs, labor turnover during repatriation and poor cross-cultural adjustment can generate losses for an MNC. For example, Stroh (1995) concluded that labor turnover results in the loss of the expatriate's intellectual knowledge relevant to the assignment location and purpose, including a possible disruption to global leadership development for those assignments where this was a purpose. Poor cross-cultural adjustment can also lead to a less-than-satisfying expatriate experience and poor performance (Bhaskar-Shrinivas, Harrison, Shaffer, and Luk 2005; Harrison, Shaffer, and Bhaskar-Shrinivas 2004). Zeira and Banai (1987) concluded that poor performance not only results in a failure to achieve the assignment's objectives, but also has the potential to damage customer relationships, jeopardize or delay start-up operations, and significantly impact subsidiary profits. Bennett, Aston, and Colquhoun (2000) mentioned other hidden costs, including damage to a company's image and disrupted relationships with host-country nationals both inside and outside the company.

Yet, the nonfinancial benefits of long-term assignments can also be extensive. For example, Kobrin (1988) proposed that the on-the-job internationalization of key managers, in terms of acquiring cross-cultural expertise, language skills, and local knowledge of the host country, was a clear benefit at the individual level. Boyacigiller (2000) and Harzing (2001) concluded that an increase in organizational knowledge resulting from a greater knowledge of foreign markets, transfer of a firm's culture and capability, and development of global managers were a benefit at the firm level. Overall, Downes and Thomas (1999) argued that the benefits of international assignments might be linked to a longer-term competitive advantage for MNCs, for example, by developing unique rare capacities through the international competencies of the top management team. This view is consistent with Barney's (1991) resource-based theory of the firm that emphasizes the importance of using employees as a source of competitive advantage to increase a firm's success (Lepak and Snell 1999; Wright, Dunford, and Snell 2001). Internal firm resources (e.g., expatriates) can generate significant nonfinancial benefits for the firm, including increasing firm knowledge and dynamic capability (Wright et al. 2001) and using expatriates to support the activities of a global strategy (Tan and Mahoney 2003). From this viewpoint, expatriates can add more economic value (i.e., benefits) to the firm than local employees in the long term.

Therefore, we conclude that approaches to defining expatriate ROI should include a combination of financial and nonfinancial costs and benefits. We propose that expatriate ROI be defined as a calculation in which the financial and nonfinancial benefits to the MNC are compared with the financial and nonfinancial costs of the international assignment, as appropriate to the assignment's purpose. We further propose that accurate rates of return are likely to be determined when the benefits are compared with the costs, irrespective of whether a cost is financial (e.g., cross-cultural training) and the corresponding benefit is nonfinancial (e.g., improved performance).

The importance of the purpose of the long-term assignment

One of the themes of this article is the importance of calculating expatriate ROI within the context of the purpose of the long-term assignment. Given that MNCs differ greatly in terms of industry, organizational culture, and overall strategic objectives (Boyacigiller 1990; Dyer and Reeves 1995), they will have different reasons for using expatriates. Edstrom and Galbraith (1977, 1994) argued that MNCs have three major purposes for using expatriates: (1) to fill international positions when qualified locals are not available, (2) for management development, and (3) to help control, coordinate, and assist in the transfer of a firm's culture. These purposes have been more recently validated by several industry surveys in which it was found that the top six reasons for using expatriates were to (1) fill a skills gap, (2) build management expertise, (3) launch new endeavors, (4) transfer technology, (5) enable managerial control, and (6) transfer corporate culture (Cendant 2002; GMAC et al. 2004). Therefore, we contend that if the purpose of a long-term assignment is to control, coordinate, and assist in the transfer of a firm's culture, then expatriates will be selected, trained, and compensated differently than if the purpose of the assignment is mostly knowledge transfer. As a result, these differences will lead to varying rates of return from one assignment to the next, as the costs and benefits associated with each assignment's purpose are likely to be different. For example, there may be a greater benefit obtained when expatriation is used for control and transfer of the firm's culture to the subsidiary than when the assignment is to fill a technical position. Therefore, not only is the purpose of the assignment likely to have a direct impact on expatriate ROI, it may also act as a moderator variable, as shown in Figure 1. For instance, more ROI may be gained by predeparture training of an expatriate who will be a chief executive abroad than of an expatriate who will provide the technical skill for a company project.

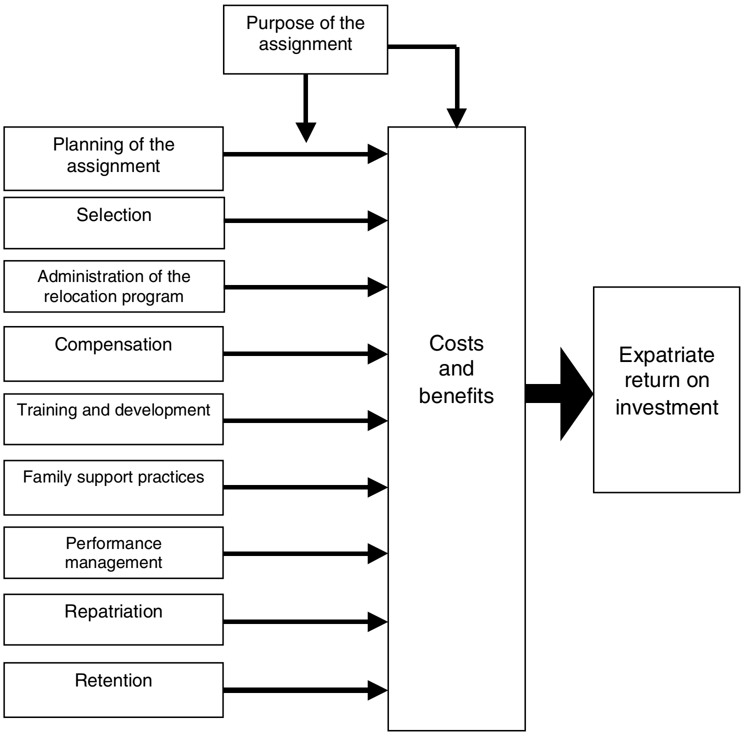

Figure 1. The system of human resource activities influencing expatriate ROI

Justifying our definition of expatriate ROI

Overall, we make certain justifications for the definition of expatriate ROI we propose. First, as Kamoche (1997) argued, there should be no "one best" ROI formula. An ROI calculation will differ from one assignment to the next because the objectives of each assignment are likely to be different. Consequently, these differences in assignment objectives reduce the usefulness of a "one best" ROI formula that expects identical costs and benefits to be calculated for each assignment. The ROI approach we suggest accounts for these differences and enables the ROI calculation to be tailored accordingly, because it focuses only on those costs and benefits that are linked to the assignment objectives. A second justification is that expatriate ROI should be calculated at different times for each international assignment. This is because, as suggested by Bonache, Brewster, and Suutari (2001) and Stroh and Caligiuri (1998), the differences in assignment purpose will not only dictate what is included in the ROI calculation but will also determine the most appropriate time to do the calculation. For instance, the original purpose of an international assignment may not have included ensuring that the expatriate was repatriated home. Therefore, outcomes such as successfully finding a suitable position in the company for the expatriate upon return or an increase in labor turnover resulting from unsuccessful repatriation would not be included in the ROI calculation, and the calculation could be made as soon as the assignment is completed. Alternatively, if a key purpose of an assignment was the development in the company of global managers and managers with an international perspective, then expatriate ROI should include the costs and benefits associated with repatriation-related outcomes, such as the lack of use of the expatriate's international skills or their labor turnover if they leave the company's employ. These calculations would need to be made at some point after completion of the assignment. Our definition of expatriate ROI allows for only those costs and benefits appropriate to the assignment's purpose to be included and therefore enables the calculation to be made at the most appropriate time.

Third, we assert that in order to avoid a misleading ROI calculation, a longer-term perspective with regard to an assignment's purpose is necessary. This is because many of the costs and benefits associated with long-term assignments are nonfinancial in nature and appear only at or after the conclusion of an assignment. As Mills and Print (1995) pointed out, accurate calculations of ROI are less likely to be made in the short term if the long-term benefits cannot be identified in the period during which the calculation occurs. Consequently, if calculations of expatriate ROI include only short-term costs and benefits, longer-term costs and benefits may not be captured—especially those benefits resulting from broader decisions made for a strategic longer-term competitive advantage, such as succession planning and the expansion of operations internationally (Prahalad and Hamel 1990). Thus, as demonstrated, the reason for the ROI approach we propose is to ensure that items included in the ROI calculation are always based on a link between the costs and benefits of the assignment and the purpose of the assignment.

The antecedents of expatriate ROI

The next section examines the literature to consider the antecedents of expatriate ROI in terms of HR activities, including the development of hypotheses for future testing. As a starting point, we discuss two theoretical perspectives to explain why these antecedents should be viewed as a *system* of HR activities when calculating expatriate ROI.

The system of human resource activities

The first theoretical perspective to consider is *transaction cost theory* that examines, among other things, the influence of a system of activities taking place during all stages of a contract (Williamson 1985; Williamson and Masten 1999). The contract of interest for this article is the international assignment, which may be considered as a contract between the MNC and the expatriate. Essentially, transaction cost theory argues that contractual activities have the potential to influence costs and benefits to the firm both *ex ante* (i.e., before execution of the contract) and *ex post* (i.e., during execution of the contract) (Benito et al. 2003; Tan and Mahoney 2003). That is, each contractual activity has the potential to increase or decrease the costs and benefits to the firm *at different times during the life of a contract.* For instance, the impact of just one contractual activity, such as the annual compensation of an expatriate, can significantly affect overall costs (Masten et al. 1999). Nonetheless, estimates of overall costs should also focus on the impact of other relevant activities, such as predeparture cross-cultural training that can increase expatriate adjustment, which, in turn, can lead to increased performance and reduced intentions to return prematurely (Bhaskar-Shrinivas et al. 2005; Harrison et al. 2004). In terms of expatriate ROI, when transaction costs are viewed within the context of a system of activities occurring at different times during a long-term assignment, a more meaningful rate of return is likely to be obtained, because all relevant costs and benefits will be captured within the context of the appropriate activities taking place.

A second theoretical perspective to consider is *high-performance work practices* (HPWP) (Becker, Huselid, Pickus, and Spratt 1997; Huselid 1995). HPWP are a group of HR activities that are viewed as a *system* of superior practices that can more fully explain costs and benefits to the firm than individual practices alone. Whereas we believe at this stage in the research it is premature to suggest that a group of HPWP can be developed to influence expatriate ROI, we believe that approaching expatriate ROI from a systems perspective of HR activities would be an important step forward from the isolated perspectives used in previous studies (Caligiuri 1997; Stroh 1995; Tung 1981, 1987). This is because a system of HR activities can more adequately explain what influences costs and benefits during a long-term assignment than individual activities alone; that is, a system of HR activities represents a group of interrelated practices in which one practice can potentially influence the costs or benefits to be derived from another. The costs of the assignment are likely to be reduced and its benefits increased when the following conditions are met: (1) the international assignment clearly defines objectives and is carefully planned; (2) the MNC uses a selection process with appropriate selection criteria based on the assignment objectives; (3) the pre-assignment and during-the-assignment training and development program supports the unique cross-cultural needs of both the assignees and their families; (4) support is provided to the family, including consideration of the partner's career; (5) appropriate performance management dealing with job and assignment challenges is conducted; and (6) the assignee is rewarded by a compensation system that is linked to the assignment's goals. Conversely, if recruitment and selection practices are poor, expatriate performance may also be poor, and training and development costs may be high. In turn, the overall costs of the assignment may increase if a poorly performing expatriate needs to be replaced.

We therefore contend that a systems approach to expatriate ROI will enable increases and decreases in rates of return to be more accurately calculated, because, as noted by scholars, although isolated practices (e.g., training and development) can improve the likelihood of assignment success, and therefore increase ROI, individual practices are less likely to be an effective substitute for the collective impact of many carefully planned HR activities operating at one time (Bennett et al. 2000; Farid and Buda 1998; Huselid 1995). Indeed, the empirical evidence suggests that systems of human resource management (HRM) policies can have bigger effects than those of individual practices alone (Dyer and Reeves 1995; Ichniowski, Shaw, and Prennushi 1997). Yet, empirical studies examining expatriate costs and benefits from a HR systems approach have not been done; therefore, the assumption requires testing in the following proposition:

> *Proposition 1: An expatriate ROI calculation that evaluates a system of HR activities during all stages of a long-term assignment will produce a more accurate rate of return than an expatriate ROI calculation that evaluates individual HR activities in isolation.*

Figure 1 illustrates our proposed system of HR activities and its proposed influence on overall expatriate ROI. It groups the system of HR activities occurring during all stages of a long-term assignment and connects the system to the expected costs and benefits from that assignment. The underlying concept is that the expected costs and benefits will be influenced by the system of HR activities and the purpose of the assignment. A calculation of those costs and benefits, in turn, will result in the ROI of the international assignment.

The antecedents of expatriate ROI: human resource practices

We now specifically review nine major HR activities taking place during a long-term assignment that potentially affect the costs or benefits that may arise from expatriation and thus cause ROI to increase or decrease. The empirical studies, reviews, and surveys of HR activities that may increase or decrease expatriate ROI are classified and listed in Table 1.

The nine HR activities we review were identified from the literature as the major practices taking place before, during, and after an international assignment in most MNCs (Becker et al. 1997; Farid and Buda 1998). They include planning the assignment, recruitment and selection of expatriates, administering the relocation program, training and development, compensation, family support practices, performance management, repatriation, and retention.

Planning the assignment

Scholars (Bonache et al. 2001; Dyer and Reeves 1995) have suggested that planning the purpose of an international assignment is probably the most important

Table 1
Empirical studies, reviews, and surveys of HR activities that may increase or decrease expatriate ROI

HR activity	Variable(s) influencing ROI	Study
Planning the assignment	Identifying the purpose of an assignment	Dyer and Reeves (1995) Kamoche (1997) Welch and Welch (1997)
Selection	Recruiting suitable candidate(s)	Arthur and Bennett (1995) Farid and Buda (1998) Harris and Brewster (1999) Porter and Tansky (1999)
Administering the relocation program	Outsourcing expatriate administration	KPMG International (2004) SHRM (2004)
Compensation	Linking compensation to assignment objectives	Bonache and Fernandez (1997) Fish and Wood (1996) Gomez-Mejia (1993) Gomez-Mejia and Welbourne (1991) Harvey (1993) Lowe, Milliman, De Cieri, and Dowling (2002) Stone (1995)
Training and development	Customizing training and development to needs of assignment	Caligiuri, Phillips, Lazarova, Tarique, and Bürgi (2001) Eschbach, Parker, and Stoeberl (2001) Harrison (1994) Shaffer and Harrison (1998) Tung (1982) Vance and Paik (2002)
Family support practices	Providing family support to increase assignment success	Arthur and Bennett (1995) Black and Gregersen (1991) Harvey (1985) KPMG International (2003) PricewaterhouseCoopers (2000) Shaffer, Harrison, Gilley, and Luk (2001)
Performance management	Customizing appraisals according to the assignment's purpose	Gregersen, Hite, and Black (1996) Hendry, Woodward, Bradley, and Perkins (2000)

HR activity	Variable(s) influencing ROI	Study
		Milliman, Nason, Zhu, and De Cieri (2002)
	Conducting appraisals during an assignment	Schuler, Fulkerson, and Dowling (1991)
		Tahvanainen (2000)
Repatriation	Planning expatriate reentry appropriate to an assignment's purpose	Forster (1994)
		GMAC et al. (2004)
		Gregersen and Black (1995)
		Lazarova and Caligiuri (2001)
		ORC (2002)
Retention	Maintaining functional turnover and functional retention appropriate to an assignment's purpose	Birdseye and Hill (1995)
		Black, Gregersen, and Mendenhall (1992)
		Forster (1994)
		Harvey (1989)
		McEvoy and Cascio (1987)
		Naumann (1993)
		Stroh (1995)

activity during expatriation. If the purpose of an assignment has not been clearly identified, the assignment may not be able to provide clear benefits to the MNC and may result in unforeseen costs. Ad hoc expatriate practices, in which relocations are rushed and poorly prepared, can often lead to higher incidences of assignment difficulties in terms of failure to achieve specific strategic goals (Torbiorn 1994; Welch and Welch 1997). The overall cost of the assignment is, therefore, likely to increase.

Kamoche (1997) proposed that international assignments should meet clear business needs and have clear business goals. Therefore, it is proposed that planning an expatriate assignment, based on meeting strategic objectives, can potentially decrease the costs (e.g., failure to achieve specific goals) and increase the benefits (e.g., improve the likelihood of assignment success) to MNCs. Under these circumstances, it is proposed that overall expatriate ROI will increase. Hence, the following proposition is offered:

> *Proposition 2: Linking expatriation to careful planning of the purpose of an international assignment will increase benefits and reduce costs, and increase expatriate ROI.*

Recruitment and selection of expatriates

Once careful planning of the purpose of an international assignment has been established, MNCs will then develop a selection process (selection criteria, selection methods) to find a suitable candidate. Yet, scholars have argued that few companies have adequate recruitment and selection practices to support their global staffing strategies (Harvey 1996a; Porter and Tansky 1999), which can result in significant costs to MNCs due to not meeting the purpose of the assignment. We propose that in these circumstances, overall expatriate ROI will be affected. Moreover, other studies have suggested that when recruitment and selection practices did not result in a "best fit" between the purpose planned for the assignment and the expatriate's skills and abilities, the assignment was less likely to achieve its objectives (Arthur and Bennett 1995; Farid and Buda 1998; Milliman, Von Glinow, and Nathan 1991). Likewise, when recruitment and selection practices were ad hoc and reactive, and not based on assignment planning and the purpose of the assignment, studies have argued that decreases in performance and productivity and increases in failed assignments were likely to occur, which are more costly to the organization in the long run (Forster 2000; Harris and Brewster 1999; Torbiorn 1994; Welch and Welch 1997).

In terms of what may cause recruitment and selection activities to increase costs, Zeira and Banai (1987) concluded that deficiencies in language ability and expertise relevant to the assignment's purpose were factors likely to increase assignment failure and decrease ROI. Tung (1981, 1982) concluded that selecting candidates who did not demonstrate relational abilities or failing to assess a spouse's ability to adapt to a foreign environment could also lead to increases in poor performance and assignment failure, thereby increasing costs and reducing benefits. Decreases in ROI would, therefore, be expected. Hence, the following proposition is offered:

> *Proposition 3: Developing recruitment and selection practices that meet the assignment's planned objectives and that result in an appropriate expatriate being selected for the assignment's purpose will increase benefits and reduce costs, and increase expatriate ROI.*

Administering the relocation program

Once the assignment has been planned and the right candidate has been selected according to the assignment's purpose, considerable costs then arise in relocating the expatriate to the new location, which increases the costs used to estimate ROI. It is estimated that administering a relocation program can cost approximately US$200,000 (Van Pelt and Wolniansky 1990). To reduce some of these costs, many MNCs outsource the administration of the relocation program (e.g., relocation of household goods, processing of immigration documentation) to independent specialists as a way to (1) ensure greater cost savings through better negotiations with relocation suppliers, (2) gain access to vendor expertise the MNC could not otherwise provide, and (3) allow the MNC to focus on its core business (KPMG International 2004; Society for Human Resource Management [SHRM] 2004). However, whereas one survey (SHRM 2004) reported that 56 percent of respondents used outsourcing specifically to save money and reduce operating costs, it also reported that less than 30 percent chose to outsource employee relocation, and less than 10 percent chose to outsource expatriate administration. The same survey reported that one of the major reasons for outsourcing was to allow HR staff to focus more on strategy, for example, developing and retaining expatriate talent where long-term international assignments are concerned. In spite of the above, to the authors' knowledge, there has been no empirical work investigating the costs associated with administering either a relocation program or its impact on ROI. Hence, the following proposition is offered:

Proposition 4: Outsourcing expatriate administration will allow HR staff to focus more on expatriate strategy, which will increase benefits and decrease costs, and increase expatriate ROI.

Compensation

Selecting a candidate to fit the purpose of the international assignment then leads to developing an effective compensation package to ensure high performance from the expatriate and thus increase benefits and decrease costs. Expatriate compensation includes base salary, mobility premiums, and hardship allowances (Mercer Human Resources Consulting 2001) and is a financial cost in expatriation that influences ROI. To avoid some of these costs, many MNCs use standardized compensation packages, because they are less costly to administer and control, and they give the perception of equity among international assignees, thereby reducing the costs associated with unplanned labor turnover (Harvey 1993; Stone 1995). But scholars have argued that standardized compensation packages do not take into account differences in assignment objectives or cultural conditions, where expatriate compensation and reward systems are often a critical factor in motivating expatriates to not only accept assignments, but to also perform in difficult locations (Bonache and Fernandez 1997; Gomez-Mejia and Welbourne 1991).

Yet, the costs associated with compensation are often outweighed by the benefits, particularly when compensation is linked to the purpose of the assignment, which then results in improvements in organizational performance (Fish and Wood 1996; Gomez-Mejia 1993). Indeed, Lowe, Milliman, De Cieri, and Dowling demonstrated "a high degree of cross-cultural consistency in the perceived utility of compensation plans . . . for achieving organizational effectiveness" (2002, 56). It is therefore proposed that expatriate compensation that is linked to the objectives of an assignment can improve overall organizational performance, which can, in turn, influence ROI in terms of increasing the benefits from international assignments. Hence, the following proposition is offered:

Proposition 5: Linking expatriate compensation packages to facilitate meeting the purposes of the international assignment will increase benefits, and increase expatriate ROI.

Training and development

Planned assignments staffed by quality candidates, who are compensated appropriately, then require appropriate training and development activities to ensure that the assignment's purposes are met and that costs from assignment failure are reduced. The training and development of expatriates involves cross-cultural preparation and language programs appropriate to the assignment's location (Black and Gregersen 1991; Forster 2000) and represents a significant financial cost to MNCs in the initial stages of expatriation. This includes not only the financial costs associated with implementing training programs for the employee and other family members (Mendenhall and Stahl 2000), but also the hidden productivity costs associated with the employee attending training sessions for a future, rather than a current, role (Bennett et al. 2000). Other costs can include difficulties in retaining highly skilled employees in the long term due to deficiencies in cultural preparation that can lead to unplanned labor turnover (Black 1988; Tung 1982, 1988a).

In contrast to the costs of training, there are also significant benefits to be gained from training in terms of better performance and cultural adjustment (Eschbach et al. 2001; Tan and Mahoney 2003). Shaffer and Harrison (2001) found that predeparture training (particularly language training) had a positive impact on expatriate and spousal adjustment that, in turn, led to improved performance. Black and Mendenhall's (1990) review concluded that cross-cultural training was generally effective, in terms of facilitating better cultural interaction. Thus, scholars have suggested that training and development programs that are customized according to an expatriate's past international experience, the assignment's objectives, the intended location, and the needs of the relocating family, are likely to be more effective than generic training and development programs (Bennett et al. 2000; Caligiuri et al. 2001; Tahvanainen 2000; Vance and Paik 2002). Harrison (1994) also suggested that training and development programs that are linked to the objectives of the assignment are likely to maximize ROI. It is therefore proposed that customized training and development programs can lead to more realistic expectations, higher levels of cross-cultural adjustment, and better overall performance, thereby increasing benefits and reducing costs. Increases in ROI are then more likely to occur. Hence, the following proposition is offered:

> *Proposition 6: Providing expatriates with training and development appropriate to the international assignment will increase benefits and reduce costs, thereby increasing expatriate ROI.*

Family support practices

Companies that have a system of HR practices of careful planning of an assignment's purpose, selection of the candidate to match the purpose, compensation to suit achieving the objectives of the assignment, and training and development to enable the expatriate to effectively carry out the assignment, are also likely to deal with the expatriate's family system. This is because scholars have found that family support practices are often critical during expatriation in order to facilitate the achievement of an assignment's objectives (Caligiuri 1997; Harvey 1985; Shaffer et al. 2001; Tung 1987), which, in turn, increases benefits and decreases costs. Conversely, a number of industry surveys (GMAC et al. 2002; KPMG International 2003; PricewaterhouseCoopers 2000) have reported that lack of family support, in terms of spousal adjustment and the dual-career issue, was the most common reason for assignment failure and increases in assignment costs. Similarly, Arthur and Bennett (1995) concluded that the family situation (defined as the adaptability of spouse and children, the spouse's positive attitude, willingness of the spouse to live abroad, and a stable marriage) was one of the most important factors contributing to overall family adjustment on assignment. Harvey (1996b) argued that the dual-career issue could not only significantly affect the willingness of expatriates to accept assignments, but also impact the likelihood of assignment success. Black and Gregersen (1991) concluded that when MNCs failed to facilitate an expatriate spouse's general adjustment, increases in failed assignments were likely to occur. Hence, the following proposition is offered:

> *Proposition 7: Providing support to the expatriate family will increase benefits and reduce costs, thereby increasing expatriate ROI.*

Performance management

Thus far, we have established that effective HR systems for international assignments include planning, selection, relocation administration, compensation, training and development, and family support practices. Once on the assignment, performance management is another important practice. Performance management can influence expatriate ROI in two ways. First, it can decrease costs and increase ROI when it is conducted *during an assignment* by (1) providing MNCs with the ability to assess whether the objectives of an assignment are likely to be met, (2) providing MNCs with an opportunity to address problems before they result in assignment failure, and (3) providing insights into the effectiveness of other HR activities, including training needs and the appropriateness of reward systems and compensation packages, that may be affecting performance (Brewster and Scullion 1997; Schuler et al. 1991; Tahvanainen 2000). When MNCs are able to monitor their strategic progress *during the assignment*, they are able to address issues before achievement of an assignment's objectives is jeopardized. Thus, early intervention and appropriate support on the part of an MNC as a result of performance appraisals conducted during an assignment can avert major problems early on, thereby increasing the likelihood of an assignment's success, and increasing ROI.

Second, performance management can decrease costs and increase ROI when appraisals are *customized*, because customized appraisals can account for differences in an assignment's purpose and the different types of jobs being performed (Gregersen et al. 1996; Hendry et al. 2000; Milliman et al. 2002). The result is that MNCs will (1) respond more appropriately to performance issues, because they will take into account the unique international and cross-cultural factors affecting an expatriate's performance, and thereby avoid implementing costly solutions a situation may not warrant (Gregersen et al. 1996); and (2) improve employee motivation, because performance can be linked to incentive systems, such as compensation and promotion, that are appropriate to the job being performed and the location in which it is being performed (Huselid 1995). It is therefore proposed that in both instances, increases in benefits would be likely, given an MNC's ability to address the unique international aspects inherent in each long-term assignment at an appropriate time conducive to achieving assignment success. The following proposition is offered:

> *Proposition 8: Customized performance management practices that are linked to an assignment's objectives, and that are conducted during all stages of an assignment, will increase benefits and reduce costs, and increase expatriate ROI.*

Repatriation

The system of HR practices considered thus far has included planning the assignment, placing the expatriate and their family on assignment, and managing the expatriate's performance. Yet, a system of HR practices must also consider how to effectively manage the end of an assignment. Successful repatriation is, therefore, a potentially critical component in the ROI calculation for two reasons.

First, repatriation can deliver considerable benefits to an MNC that, if lost, can significantly affect ROI. For example, scholars (Erdener and Torbiorn 1999; Gregersen and Black 1995; Lazarova and Caligiuri 2001; Stroh 1995) have argued that repatriated staff can improve strategic capabilities when their international knowledge and expertise are leveraged during repatriation. As a result, MNCs long-term strategic capabilities can be improved, and ROI can be expected to increase. Yet, studies (Banai 1991; Black et al. 1992; Gregersen and Stroh 1997) and surveys (Cendant 2002) have found that repatriation is one of the most poorly managed activities in MNCs, with the Cendant survey reporting that 55 percent of respondents rated repatriation as one of their major challenges for long-term assignments. The results are evident in poor integration of an expatriate's expertise and knowledge gained from the assignment (Banai 1991), and the potential loss of employees to competitors during the first two years of repatriation (Forster 1994; GMAC et al. 2002; Organizational Resources Counselors [ORC] 2002). Both outcomes represent a considerable strategic cost to MNCs and would subsequently decrease ROI.

Second, if the purpose of an assignment does not include a repatriation strategy, then any cost and benefit outcomes to be expected from repatriation (e.g., the integration, or lack thereof, of intellectual knowledge gained from the assignment) are not likely to impact expatriate ROI. This is because if successful repatriation home is not part of an assignment's objectives, then the activity should not be included in the ROI calculation. To do so would be misleading in terms of the final ROI outcome. For example, the GMAC et al. (2004) survey reported that 68 percent of respondents provided no post-assignment guarantees of employment to expatriates, yet the same survey reported that many MNCs still include repatriation statistics in their ROI calculations, often because they are the only data available to them. Further compounding the problem is that for those MNCs who intend to repatriate as a specific purpose of an assignment, there appears to be a disconnect between intending to repatriate and ensuring it can be successfully achieved. For example, the ORC (2002) survey found that 67 percent of MNCs offered no contractual agreements to expatriates regarding job-level guarantees during repatriation, yet, as already stated, for many of them, the primary reason for using expatriates is to acquire international expertise and knowledge *and to then leverage it upon their return* (Lazarova and Caligiuri 2001; Stroh 1995).

This dilemma highlights the importance of context with regard to an assignment's purpose in terms of expatriate ROI; that is, not every HR activity is appropriate for every long-term assignment, and not every HR activity should be automatically included in the ROI calculation. With regard to repatriation, this is particularly important, because calculations of expatriate ROI will not be accurate if repatriation has not been carefully planned and managed with rates of return in mind. The importance of context also highlights why customizing the ROI calculation for each assignment, rather than applying a standardized formula that expects identical costs and benefits to be calculated across the board, is essential. Consequently, careful consideration as to the inclusion, or exclusion, of repatriation is important to the expatriate ROI calculation. The following proposition is offered:

> *Proposition 9: Planning and managing repatriation as appropriate to an assignment's purpose will increase benefits and decrease costs, and increase expatriate ROI.*

Retention

Finally, if a system of HR activities is perfectly managed, yet an MNC is unable to retain the talent in which it has invested a considerable amount of time, money, and effort, then ineffective retention practices can be a costly factor in the ROI calculation. For example, Stroh (1995) concluded that the turnover of expatriate staff after repatriation incurs an obvious cost to MNCs when the loss is *unexpected* and an MNC loses key employees considered pivotal to achieving its long-term strategic objectives. However, the unexpected turnover of expatriates *during* an assignment (e.g., due to early withdrawals and premature returns) can be equally as costly (GMAC et al. 2004; Shaffer and Harrison 1998; Tung 1988b). All can affect ROI considerably.

To highlight the significance of retention and its potential impact on ROI, two factors with regard to costs must be considered. First, retention statistics must be interpreted correctly and appropriately in order to contribute accurate data to the ROI calculation. For example, it has been reported that 20 percent to 44 percent of British and U.S. expatriates leave an MNC within one to two years of repatriating (Forster 1994; GMAC et al. 2002). Yet, the statistics do not clarify whether labor turnover is expected or unexpected as a result of linking retention to the purpose of international assignments. This point was explained in more detail in the preceding discussion on repatriation and is mentioned here because it also applies to retention. Consequently, scholars have concluded that expatriate retention and the costs associated with it should be defined within the context of the risks associated with losing only *high* performers (Abelson and Baysinger 1984; Black et al. 1992), whose retention is a specific objective of an international assignment. This is because when poor performers leave an organization, labor turnover may not always be unwelcome or as costly. As such, expatriate retention needs to be approached as a carefully managed combination of functional retention and functional turnover, in which high performers are retained and low performers are lost, as part of a larger strategic plan (Black et al. 1992; McEvoy and Cascio 1987). Under these circumstances, the replacement of poor performers during an assignment from a strategic standpoint (e.g., to minimize assignment failure) may not be as costly to MNCs in the long term, and the long-term influences on ROI may actually be minimized.

Second, when retention statistics are interpreted correctly, and an MNC unexpectedly loses key talent, labor turnover can be devastating and very costly (O'Connor 2002). For example, if the overall purpose of an assignment is to acquire international competencies, and the majority of an expatriate investment is centered on a small group of key individuals to deliver those competencies, the loss of these employees either during an assignment or upon repatriation to join a competitor would impact expatriate ROI considerably (Birdseye and Hill 1995; Naumann 1993). To understand why these costs occur, a number of variables have been shown to contribute to the problem: (1) poor management of an expatriate's career development and failure to appreciate the international experience acquired on the assignment, which leads to increased career uncertainty (Stroh 1995); (2) downward job mobility or a perceived reduction in job status due to a lack of adequate planning for the expatriate's return (Forster 1994); (3) increased financial pressure due to the elimination of assignment-only allowances, resulting in the expatriate seeking a higher-paying job elsewhere (Harvey 1989, 1993); and (4) lack of communication during the assignment to manage repatriation expectations (Lazarova and Caligiuri 2001). By addressing these concerns and providing the appropriate support to ensure effective retention, scholars have argued that decreases in costs (i.e., the cost of replacing international expertise) and increases in benefits (i.e., the ability to leverage international competencies for long-term strategic advantage) are more likely to occur (Harvey 1989; Stroh 1995). Expatriate ROI is also likely to increase.

Overall, it is, therefore, proposed that the *unexpected* turnover of expatriate staff, during or after an assignment, incurs considerable costs to MNCs, and decreases overall ROI. Yet when retention is carefully planned and managed as a combination of functional retention and functional turnover, benefits are likely to increase, as is expatriate ROI. Hence, the following proposition is offered:

Proposition 10: Maintaining functional retention and functional turnover of expatriates as appropriate to an assignment's purpose will increase benefits and decrease costs, and increase expatriate ROI.

Discussion

We contend that expatriate ROI is a complex phenomenon requiring careful examination on many levels in order to produce a calculation that has a meaningful rate of return. Expatriate ROI can, therefore, be explained by four interrelated approaches. First, it must contain a summary of costs and benefits incurred during a long-term international assignment, and these costs and benefits must be defined both financially (e.g., the cost of predeparture training, the processing of immigration documents, or the sales revenue of a particular business unit) and nonfinancially (e.g., the development of global leadership talent, or the transfer of technical knowledge). Second, the costs and benefits of a long-term assignment must always be defined within the context of the purpose of the assignment. For example, if an assignment is designated as a one-way transfer for which no post-assignment job guarantees are offered, the inclusion of any repatriation-related outcomes (such as labor turnover) is not relevant to the expatriate ROI calculation for that assignment. Third, the compilation of costs and benefits data must be approached from a systems perspective that avoids investigating only individual costs and benefits at one point in time (e.g., training costs during predeparture preparation) to the exclusion of a system of HR activities occurring during the entire assignment (e.g., the combined effects of expatriate selection, remuneration, repatriation, and retention). Finally, expatriate ROI must be calculated at a time that is appropriate for meeting the assignment's objectives, for example, at the immediate conclusion of an assignment or at some point during repatriation. Determining when to calculate expatriate ROI depends upon the specific purpose of the assignment and requires that a long-term, rather than short-term, view be adopted. This is because costs incurred at the start of an assignment may not be able to be matched to a corresponding benefit until the completion of the assignment years later. The timing of the calculation, therefore, remains an important step that can help avoid a rate of return that is misleading or incorrect.

Given our explanation of what expatriate ROI is, we argue that expatriate ROI must be defined as a calculation in which the financial and nonfinancial benefits to the MNC are compared to the financial and nonfinancial costs of the international assignment, as appropriate to the assignment's purpose. We further contend that accurate rates of return will only be achieved when the benefits are compared to the costs, irrespective of whether a cost is financial (e.g., cross-cultural training) and the corresponding benefit is nonfinancial (e.g., improved performance).

Our analysis of the literature thus far has highlighted that the importance of an expatriate ROI calculation is not just in determining the rate of return (as outlined in the first research question), but also in understanding why rates of return increase and decrease; that is, what are the antecedents of expatriate ROI? As we have acknowledged, the antecedents of expatriate ROI are, in fact, not new. Many of them have been identified in prior research (as outlined in Table 1) and include planning, selection, administering the relocation program, training and development, compensation, family support, performance management, repatriation, and retention. What is new is the way in which we propose these antecedents be incorporated into expatriate ROI calculations. Therefore, whereas we acknowledge that each individual antecedent has the potential to increase or decrease ROI on its own, as identified in prior research, we contend that understanding the interrelationships of these antecedents (from a systems perspective that we adopted in this article) will produce a more accurate and useful ROI calculation in the long term. We, therefore, believe that identifying and understanding these antecedents is a key step to undertaking ROI calculations, because (1) they can enable more appropriate and relevant costs and benefits data to be compiled for each assignment, thereby improving the accuracy of ROI calculations; and (2) they can give scholars and practitioners greater insight into, and the ability to manage, the HR activities occurring during an assignment that have the potential to affect ROI at the conclusion of an assignment. Of course, these antecedents must only be included in an ROI calculation if they can be linked to the purpose of an assignment (e.g., repatriation-related outcomes) and if they occurred during an assignment (e.g., labor turnover).

Conclusion

There are four major conclusions. First, there is evidence to suggest that expatriate ROI should be defined as a calculation in which the financial and nonfinancial benefits to the MNC are compared to the financial and nonfinancial costs of the international assignment, as appropriate to the assignment's purpose. Second, as a result of our literature review, we propose that an effective HR system of activities that comprises planning, selection, administering the relocation program, training and development, compensation, family support, performance management, repatriation, and retention will reduce costs and increase benefits, and thus increase expatriate ROI. Third, expatriate ROI should be calculated differently for each long-term assignment, and perhaps at different times during the assignment, as dictated by the purposes for which the assignment was originally intended. Finally, expatriate ROI remains a very important field of inquiry, yet very little is known about it. It is necessary to develop a theoretical foundation in which some of the most fundamental questions about the nature of expatriate ROI can be explained as a starting point toward further research on this topic.

Consequently, we recommend that expatriate ROI requires a four-step approach: (1) identifying financial and nonfinancial costs and benefits, (2) linking the costs and benefits to the purpose of the long-term assignment, (3) identifying the appropriate antecedents from a systems perspective, and (4) conducting the calculation at an appropriate time within the context of the assignment's purpose.

Expatriate ROI is undoubtedly an important topic, as evidenced by the considerable efforts of MNCs to find cost-reducing alternatives to long-term international assignments. Yet no empirical studies have investigated expatriate ROI. With this in mind, we have approached our initial investigation of this topic with thoroughness and caution in order to be absolutely certain that we have considered all possible explanations for understanding the phenomenon. We have adopted a multidisciplinary perspective to assist in developing a sound theoretical foundation about what expatriate ROI really is, and we have argued and justified, through an extensive review of the academic literature, the relevant and important points that should help us not only to define expatriate ROI but also to understand its antecedents.

Yet, it must be said that in this article, we have proposed only one methodological approach to calculating expatriate ROI, which now requires testing. But there can be other approaches. We encourage future research to use the approach proposed here as a starting point from which to refine our initial investigation and to extend the theoretical foundation. We also suggest that future research considers applying our approach to other types of assignments (for example, short-term assignments), including domestic relocations. In doing so, we believe that scholars and practitioners alike will be better equipped to deal with not only the increasing demands of a more globalized workforce, but also with the needs of HR managers who must continue to justify their international mobility programs to senior management.

References

Abdallah, W.M., and D.E. Keller. 1985. "Measuring the Multinational's Performance." *Management Accounting* 67 (4): 26–30.

Abelson, M.A., and B.D. Baysinger. 1984. "Optimal and Dysfunctional Turnover: Toward an Organizational Level Model." *Academy of Management Review* 9 (2): 331–41.

Arthur, W., and W. Bennett. 1995. "The International Assignee: The Relative Importance of Factors Perceived to Contribute to Success." *Personnel Psychology* 48 (1): 99–114.

Banai, M. 1991. "Human Resource Management Problems in American Multinational Corporations." *Business in the Contemporary World* 3 (4): 113–20.

Barney, J.B. 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17 (1): 99–120.

Becker, B.E., M.A. Huselid, P.S. Pickus, and M.F. Spratt. 1997. "HR as a Source of Shareholder Value: Research and Recommendations." *Human Resource Management* 36 (1): 39–47.

Benito, G.R., S. Tomassen, J. Bonache-Perez, and J. Pla-Barber. 2003. "A Transaction Cost Analysis of Staffing Decisions in International Operations." Paper presented at the Nordic Workshop on Transaction Cost Economics in Business Administration, Norwegian School of Economics and Business Administration, Norway, June 20–21.

Bennett, R., A. Aston, and T. Colquhoun. 2000. "Cross-Cultural Training: A Critical Step in Ensuring the Success of International Assignments." *Human Resource Management* 39 (2/3): 239–50.

Bhaskar-Shrinivas, P., D.A. Harrison, M.A. Shaffer, and D.M. Luk. 2005 "Input-Based and Time-Based Models of International Adjustment." *Academy of Management Journal* 48 (2): 257–81.

Birdseye, M.G., and J.S. Hill. 1995. "Individual, Organizational/Work, and Environmental Influences on Expatriate Turnover Tendencies: An Empirical Study." *Journal of International Business Studies* 26 (4): 787–813.

Black, J.S. 1988. "Work Role Transitions: A Study of American Expatriate Managers in Japan." *Journal of International Business Studies* 19 (2): 277–94.

Black, J.S., and H.B. Gregersen. 1991. "The Other Half of the Picture: Antecedents of Spouse Cross-Cultural Adjustment." *Journal of International Business Studies* 22 (3): 461–77.

Black, J.S., and M.E. Mendenhall. 1990. "Cross-Cultural Training Effectiveness: A Review and a Theoretical Framework for Future Research." *Academy of Management Review* 15 (1): 113–36.

Black, J.S., H.B. Gregersen, and M.E. Mendenhall. 1992. "Toward a Theoretical Framework of Repatriation Adjustment." *Journal of International Business Studies* 23 (4): 737–58.

Black, J.S., H.B. Gregersen, M.E. Mendenhall, and L.K. Stroh. 1999. *Globalizing People Through International Assignments.* Reading, MA: Addison-Wesley.

Bonache, J., and Z. Fernandez. 1997. "Expatriate Compensation and Its Link to the Subsidiary Strategic Role: A Theoretical Analysis." *International Journal of Human Resource Management* 8 (4): 457–75.

Bonache, J., C. Brewster, and V. Suutari. 2001. "Expatriation: A Developing Research Agenda." *Thunderbird International Business Review* 43 (1): 3–20.

Boudreau, J.W., and P.M. Ramstad. 1997. "Measuring Intellectual Capital: Learning from Financial History." *Human Resource Management* 36 (3): 343–56.

Boyacigiller, N.A. 1990. "The Role of Expatriates in the Management of Interdependence, Complexity and Risk in Multinational Corporations." *Journal of International Business Studies* 21 (3): 1–11.

———. 2000. "The International Assignment Reconsidered." In *Readings and Cases in International Human Resource Management*, ed. M.E. Mendenhall and G. Oddou, 125–32. London: South-Western College Publishing.

Brewster, C., and H. Scullion. 1997. "A Review and Agenda for Expatriate HRM." *Human Resource Management Journal* 7 (3): 31–41.

Brief, R.P., and R.A. Lawson. 1992. "The Role of the Accounting Rate of Return in Financial Statement Analysis." *Accounting Review* 67 (2): 411–26.

Caligiuri, P. 1997. "Assessing Expatriate Success: Beyond Just 'Being There.'" In *New*

Approaches to Employee Management, ed. D. Saunders and Z. Aycan, 117–40. Greenwich, CT: JAI Press.
Caligiuri, P., J. Phillips, M. Lazarova, I. Tarique, and P. Bürgi. 2001. "The Theory of Met Expectations Applied to Expatriate Adjustment: The Role of Cross-Cultural Training." *International Journal of Human Resource Management* 12 (3): 357–72.
Canibano, L., M. Garcia-Ayuso, and P. Sanchez. 2000. "Accounting for Intangibles: A Literature Review." *Journal of Accounting Literature* 19 (1): 102–30.
Cendant. 2001. *International Assignment Policies and Practices Survey: Asia Pacific.* Hong Kong: Cendant Mobility International Assignment Services.
———. 2002. *Worldwide Benchmark Study: New Approaches to Global Mobility.* Bethesda, MD: Cendant Mobility International Assignment Services.
———. 2004. *Emerging Trends in Global Mobility: The Assignee Perspective.* Danbury, CT: Cendant Mobility International Assignment Services.
Copeland, L., and L. Griggs. 1985. *Going International: How to Make Friends and Deal Effectively in the Global Marketplace.* New York: Random House.
Danfy, R.J. 1975. "Analyzing the Return on Investment." *Management Accounting* 57 (3): 31–32.
Downes, M., and A.S. Thomas. 1999. "Managing Overseas Assignments to Build Organizational Knowledge." *Human Resource Planning* 22 (4): 33–44.
Dyer, L., and T. Reeves. 1995. "Human Resource Strategies and Firm Performance: What Do We Know and Where Do We Need to Go?" *International Journal of Human Resource Management* 6 (3): 656–70.
Edstrom, A., and J.R. Galbraith. 1977. "Transfer of Managers as a Coordination and Control Strategy in Multinational Organizations." *Administrative Science Quarterly* 22 (2): 248–63.
———. 1994. "Alternative Policies for International Transfers of Managers." *Management International Review* 1 (1): 71–82.
Erdener, C., and I. Torbiorn. 1999. "A Transaction Costs Perspective on International Staffing Patterns: Implications for Firm Performance." *Management International Review* 39 (4): 89–106.
Eschbach, D., G. Parker, and P. Stoeberl. 2001. "American Repatriate Employees' Retrospective Assessments of the Effects of Cross-Cultural Training on Their Adaptation to International Assignments." *International Journal of Human Resource Management* 12 (2): 270–87.
Farid, M., and R. Buda. 1998. "Enhancing the Link Between Expatriate Selection and Success: Organization Commitment to Global Career Development." *International Journal of Management* 15 (4): 516–24.
Fish, A., and J. Wood. 1996. "A Review of Expatriate Staffing Practices in Australian Business Enterprises." *International Journal of Human Resource Management* 7 (4): 846–65.
Flamholtz, E. 1985. *Human Resource Accounting: Advances in Concepts, Methods and Applications.* San Francisco: Jossey-Bass.
Forster, N. 1994. "The Forgotten Employees? The Experiences of Expatriate Staff Returning to the UK." *International Journal of Human Resource Management* 5 (4): 405–27.
———. 2000. "Expatriates and the Impact of Cross-Cultural Training." *Human Resource Management Journal* 10 (3): 63–79.
GMAC Global Relocation Services, National Foreign Trade Council (NFTC), and Society for Human Resource Management (SHRM) Global Forum. 2001. *Global*

Relocation Trends 2001 Survey Report. Warren, NJ: GMAC Global Relocation Services.
———. 2002. *Global Relocation Trends 2002 Survey Report.* Warren, NJ: GMAC Global Relocation Services.
———. 2004. *Global Relocation Trends 2003/2004 Survey Report.* Warren, NJ: GMAC Global Relocation Services.
Gomez-Mejia, L. 1993. "Compensation, Organizational Strategy, and Firm Performance." *Personnel Psychology* 46 (1): 196–205.
Gomez-Mejia, L., and T. Welbourne. 1991. "Compensation Strategies in a Global Context." *Human Resource Planning* 14 (1): 29–41.
Gregersen, H.B., and J.S. Black. 1995. "Keeping High Performers After International Assignments: A Key to Global Executive Development." *Journal of International Management* 1 (1): 3–31.
Gregersen, H.B., and L.K. Stroh. 1997. "Coming Home to the Arctic Cold: Antecedents to Finnish Expatriate and Spouse Repatriation Adjustment." *Personnel Psychology* 50 (3): 635–54.
Gregersen, H.B., J. Hite, and J.S. Black. 1996. "Expatriate Performance Appraisal in U.S. Multinational Firms." *Journal of International Business Studies* 27 (4): 711–39.
Harris, H., and C. Brewster. 1999. "The Coffee-Machine System: How International Selection Really Works." *The International Journal of Human Resource Management* 10 (3): 488–500.
Harrison, D.A., M.A. Shaffer, and P. Bhaskar-Shrinivas. 2004. "Going Places: Roads More and Less Traveled in Research on Expatriate Experiences." *Research in Personnel and Human Resources Management* 23 (1): 199–247.
Harrison, J.K. 1994. "Developing Successful Expatriate Managers: A Framework for the Structural Design and Strategic Alignment of Cross-Cultural Training Programs." *Human Resource Planning* 17 (3): 17–35.
Harvey, M. 1985. "The Executive Family: An Overlooked Variable in International Assignments." *Columbia Journal of World Business* 20 (1): 84–92.
———. 1989. "Repatriation of Corporate Executives: An Empirical Study." *Journal of International Business Studies* 20 (1): 131–44.
———. 1993. "Empirical Evidence of Recurring International Compensation Problems." *Journal of International Business Studies* 24 (4): 785–99.
———. 1996a. "The Selection of Managers for Foreign Assignments: A Planning Perspective." *Columbia Journal of World Business* 31 (4): 102–18.
———. 1996b. "Addressing the Dual-Career Expatriation Dilemma in International Relocations." *Human Resource Planning* 19 (4): 18–39.
Harzing, A.W. 2001. "Of Bears, Bumble-Bees, and Spiders: The Role of Expatriates in Controlling Foreign Subsidiaries." *Journal of World Business* 36 (4): 366–79.
Hendry, C., S. Woodward, P. Bradley, and S. Perkins. 2000. "Performance and Rewards: Cleaning Out the Stables." *Human Resource Management Journal* 10 (3): 46–62.
Huselid, M.A. 1995. "The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance." *Academy of Management Journal* 38 (3): 635–72.
Ichniowski, C., K. Shaw, and G. Prennushi. 1997. "The Effects of Human Resource Management Practices on Productivity: A Study of Steel Finishing Lines." *American Economic Review* 87 (3): 291–313.
Kamoche, K. 1997. "Knowledge Creation and Learning in International HRM." *The International Journal of Human Resource Management* 8 (3): 213–25.

Kobrin, S.J. 1988. "Expatriate Reduction and Strategic Control in American Multinational Corporations." *Human Resource Management* 27 (1): 22–29.

KPMG International. 2003. *Global Assignment Policies and Practices Survey.* New York: KPMG.

———. 2004. *Global Assignment Policies and Practices Survey.* New York: KPMG.

Laitinen, E.K. 2003. "Future-Based Management Accounting: A New Approach with Survey Evidence." *Critical Perspectives on Accounting* 14 (3): 293–323.

Lazarova, M., and P. Caligiuri. 2001. "Retaining Repatriates: The Role of Organizational Support Practices." *Journal of World Business* 36 (4): 389–401.

Lepak, D.P., and S.A. Snell. 1999. "The Human Resource Architecture: Toward a Theory of Human Capital Allocation and Development." *Academy of Management Review* 24 (1): 31–49.

Lowe, K.B., J. Milliman, H. De Cieri, P.J. Dowling. 2002. "International Compensation Practices: A Ten-Country Comparative Analysis." *Human Resource Management* 4 (1): 45–66.

Masten, S.E., J.W. Meehan, and E.A. Snyder. 1999. "The Costs of Organization." In *The Economics of Transaction Costs*, ed. O.E. Williamson and S.E. Masten, 256–80. Cheltenham, UK: Edward Elgar.

McEvoy, G., and W. Cascio. 1987. "Do Good or Poor Performers Leave? A Meta-Analysis of the Relationship Between Performance and Turnover." *Academy of Management Journal* 30 (4): 744–63.

Mendenhall, M.E., and G.K. Stahl. 2000. "Expatriate Training and Development: Where Do We Go from Here?" *Human Resource Management* 39 (2/3): 251–65.

Mercer Human Resource Consulting. 2001. *International Assignments—A Survey of Premiums, Incentives and Company Practices.* New York: Mercer HRC.

———. 2003. *International Assignments Survey.* Geneva: Mercer HRC.

Milliman, J., M.A. Von Glinow, and M. Nathan. 1991. "Organizational Life Cycles and Strategic International Human Resource Management in Multinational Companies: Implications for Congruence Theory." *Academy of Management Review* 16 (2): 318–39.

Milliman, J., S. Nason, C. Zhu, and H. De Cieri. 2002. "An Exploratory Assessment of the Purposes of Performance Appraisals in North and Central America and the Pacific Rim." *Human Resource Management* 41 (1): 87–102.

Mills, R., and C. Print. 1995. "Strategic Value Analysis." *Management Accounting* 73 (2): 35–37.

Mills, R., S. Rowbotham, and J. Robertson. 1998. "Using Economic Profit in Assessing Business Performance." *Management Accounting* 76 (10): 34–38.

Naumann, E. 1993. "Antecedents and Consequences of Satisfaction and Commitment Among Expatriate Managers." *Group and Organization Management* 18 (2): 153–87.

O'Connor, R. 2002. "Plug the Expat Knowledge Drain." *HR Magazine* 47 (10): 101–7.

Organizational Resources Counselors (ORC). 2002. *Worldwide Survey of International Assignment Policies and Practices.* New York: ORC.

Porter, G., and J.W. Tansky. 1999. "Expatriate Success May Depend on a 'Learning Orientation': Considerations for Selection and Training." *Human Resource Management* 38 (1): 47–60.

Prahalad, C., and G. Hamel. 1990. "The Core Competence of the Corporation." *Harvard Business Review* 68 (3): 79–91.

PricewaterhouseCoopers. 2000. *International Assignments: European Policy and Practice Key Trends 1999/2000.* London: PricewaterhouseCoopers.

———. 2001. *Managing a Virtual World: Key Trends 2000/2001*. London: PricewaterhouseCoopers.

———. 2002. *Managing Mobility Matters—A European Perspective*. London: PricewaterhouseCoopers.

Rappaport, A. 1981. "Selecting Strategies that Create Shareholder Value." *Harvard Business Review* 59 (3): 139–49.

Schachner, L. 1973. "Return on Investment: Its Values, Determination and Uses." *CPA Journal* 43 (4): 277–81.

Schuler, R.S., J.R. Fulkerson, and P.J. Dowling. 1991. "Strategic Performance Measurement and Management in Multinational Corporations." *Human Resource Management* 30 (3): 365–93.

Shaffer, M.A., and D.A. Harrison. 1998. "Expatriates' Psychological Withdrawal from International Assignments: Work, Non-Work, and Family Influences." *Personnel Psychology* 51 (1): 87–118.

———. 2001. "Forgotten Partners of International Assignments: Development and Test of a Model of Spouse Adjustment." *Journal of Applied Psychology* 86 (2): 238–54.

Shaffer, M.A., D.A. Harrison, K.M. Gilley, and D.M. Luk. 2001. "Struggling for Balance amid Turbulence on International Assignments: Work/Family Conflict, Support and Commitment." *Journal of Management* 27 (1): 99–121.

Sheridan, W.R. 1998. "Expatriates: Moving from Cost Management to ROI." *ACA News* 41 (8): 6–7.

Society for Human Resource Management (SHRM). 2004. *Human Resource Outsourcing Survey Report*. Alexandria, VA: SHRM.

Spencer, S. 1999. "Value-Based International Assignments." *Benefits and Compensation International* 29 (1): 36–41.

Stewart, G.B., III. 1991. *The Quest for Value: A Guide for Senior Managers*. New York: HarperBusiness.

Stone, R. 1995. "Expatriate Remuneration Practices: A Survey of Australian Multinationals." *International Journal of Management* 12 (3): 364–72.

Stroh, L.K. 1995. "Predicting Turnover Among Repatriates: Can Organizations Affect Retention Rates?" *International Journal of Human Resource Management* 6 (2): 443–56.

Stroh, L.K., and P. Caligiuri. 1998. "Increasing Global Competitiveness Through Effective People Management." *Journal of World Business* 33 (1): 1–16.

Tahvanainen, M. 2000. "Expatriate Performance Management: The Case of Nokia Telecommunications." *Human Resource Management* 39 (2/3): 267–75.

Tan, D., and J.T. Mahoney. 2003. "Explaining the Utilization of Managerial Expatriates from the Perspectives of Resource-Based, Agency, and Transaction Costs Theories." *Advances in International Management* 15 (1): 179–205.

Torbiorn, I. 1994. "Operative and Strategic Use of Expatriates in New Organizations and Market Structures." *International Studies of Management and Organization* 24 (3): 5–17.

Tung, R.L. 1981. "Selection and Training of Personnel for Overseas Assignments." *Columbia Journal of World Business* 16 (2): 68–78.

———. 1982. "Selection and Training Procedures of US, European and Japanese Multinationals." *California Management Review* 25 (1): 57–71.

———. 1987. "Expatriate Assignments: Enhancing Success and Minimizing Failure." *Academy of Management Executive* 1 (2): 117–26.

———. 1988a. "Career Issues in International Assignments." *Academy of Management Executive* 11 (3): 241–44.

———. 1988b. *The New Expatriates: Managing Human Resources Abroad.* Cambridge, MA: Ballinger.

Van Pelt, P., and N.Wolniansky. 1990. "The High Cost of Expatriation." *Management Review* 79 (7): 40–41.

Vance, C.M., and Y. Paik. 2002. "One Size Fits All in Expatriate Pre-Departure Training? Comparing the Host Country Voices of Mexican, Indonesian, and U.S. Workers." *Journal of Management Development* 21 (7/8): 557–71.

Welch, D.E., and L.S. Welch. 1997. "Pre-Expatriation: The Role of HR Factors in the Early Stages of Internationalization." *International Journal of Human Resource Management* 8 (4): 402–13.

Williamson, O.E. 1985. *The Economic Institutions of Capitalism.* New York: Free Press.

Williamson, O.E., and S.E. Masten. 1999. *The Economics of Transaction Costs.* Cheltenham, UK: Edward Elgar.

Wright, P.M., B.B. Dunford, and S.A. Snell. 2001. "Human Resources and the Resource Based View of the Firm." *Journal of Management* 27 (6): 701–22.

Zeira, Y., and M. Banai. 1987. "Selecting Managers for Foreign Assignments." *Management Decision* 25 (4): 38–47.