



UNIVERSITY
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AUSTRALIA

Volume 5

Issue 3 *Australasian Accounting Business and Finance
Journal*

Article 5

Are Accounting Metrics Applicable to Human Resources? The Case of Return on Valuing Assignments

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Recommended Citation

Steen, Adam and Welch, Denice, Are Accounting Metrics Applicable to Human Resources? The Case of Return on Valuing Assignments, *Australasian Accounting, Business and Finance Journal*, 5(3), 2011, 57-72.

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Abstract

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Keywords

Accounting; Human Resources; Return on Investment.



Are Accounting Metrics Applicable to Human Resources? The Case of Return on Investment in Valuing International Assignments

Adam Steen¹ and Denice Welch²

Abstract

The importance of accounting for human resources has long been recognised by the Accounting profession. Until recently, Human Resource Accounting (HRA) literature has been dominated by discussion as to whether humans fit the traditional definition of assets, and how to measure and report them. We investigate the concept of human capital and its measurement through a review of the HRA literature, as well as the literature in Human Resources (HR). This paper then draws on the findings of a small exploratory study into the measurement of Return on Investment (ROI) for international assignments. Interview data reveals that intangible costs and benefits are problematic when applying such a metric; that much of the outcome from the assignment is intellectual capital, in its broad sense, and therefore difficult to isolate and effectively measure.

Keywords: Accounting: Human Resources: Return on Investment

JEL Classification: M49, M50, M54, M59.

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Introduction

The importance of accounting for human resources has long been recognised by the Accounting profession (AAA 1973 as cited in Flamholtz 1999); in part to assist management in the control of human resources, and as a broader consideration of the human side of business - the “consequences of accounting systems in action” (Hopwood 1976, p.131). A strong motivation is to ensure the field of accounting stays in step with managerial requirements for accurate information to enhance decision-making. The quest to derive suitable metrics is further driven by the recent emphasis on corporate social responsibility and ‘triple bottom line reporting’; accounting for intangibles such as intellectual property; and the contemporary view of people as a key source of competitive advantage (Verma & Dewe 2008).

One could argue that the sub-field of Human Resource Accounting (HRA) has been influenced by these general objectives. The aim of HRA is to contribute to the management of the organisation by optimising the value of its human assets. HRA literature centres on developing measures that can adequately capture and report, in a tangible form, the worth of people and their contribution to the organisation (Mayo 2005; Verma & Dewe 2008). The significance of this is noted by Flamholtz, Bullen and Hua (2002, p.947) when they propose that “although HRA has important implications for external financial reporting in the contemporary economic environment, HRA has even greater significance as a powerful managerial tool in internal human resource management decisions”. According to Roslender, (1997, p.10), citing Flamholtz (1999) the leading figure in the field, HRA “was first and foremost a development in managerial accounting”. He further notes that, while Flamholtz emphasises the managerial aspects of HRA, “its association with financial reporting remained more dominant” (ibid).

Until relatively recently, the HRA literature has been dominated by discussion as to whether humans fit the traditional definition of assets and how to measure and report them. Attempts lately have been made to apply a wider definition, acknowledging its usefulness to management and management accounting practice. Toulson and Dewe (2004) note the growing “acceptance in management and HR that people management is a key element in the strategic planning of organisations”. They argue that HR needs to be able to identify and apply appropriate measurement techniques; and that practices should to be developed and disseminated. They note however, that this research has been overshadowed by the ongoing debate over measurement concerns such as whether to capitalise or expense investment in human resources and whether human resources qualify as assets in an accounting sense. In a similar vein, Cascio (1991) and Fitz-enz (1984, 1990) argue that human resources need to be measured in terms of their strategic management potential as expressed through concepts such as human value management (Fitz-enz 1990) and HR expense models (Cascio 1991). As Collier (2009, p.340) notes:

While accounting for labour is not an asset that would be shown in a Balance Sheet, in practical terms labour is one of the most important assets of a business... A strategic management accounting approach to human resources would be to value (for decision making not reporting) the investment in the knowledge and skills of employees. This might avoid taking short-term decisions to make employees redundant.

The challenges for the firm are: first, how to measure the impact from an employee’s future increase in productivity; and second, how to determine the economic contribution to the firm from expenditure on the firm’s human resources. By way of illustrating these complex issues, this paper draws on the findings of a small exploratory interview-based study of nine multinational firms (five based in Finland and four in Australia) into the measurement of Return on Investment (ROI) for international assignments. The case of international assignments was chosen because deploying people

internationally is an integral part of global business. As international transfers are expensive - typically estimated as three times the employee's annual salary for each year on assignment – one would expect that deriving a suitable metric to determine value would be a high priority. However, there is limited work that evaluates their true value to the organisation and the individuals concerned. Nor has the potential of financial metrics such as return on investment been fully investigated (McNulty & Tharenou 2004). What little research that has been conducted (mainly in the form of consultancy firm surveys) suggests that, in the limited situations where companies use ROI, it is as part of cost justification. For example, a 2006 KPMG survey found that ROI is still often linked to the organisation's bottom line; and that the approach to assignment management is often driven by a desire to recover costs incurred.

The paper is structured as follows: We commence with a review of the literature on Accounting for Human Resources (commonly known as Human Resource Accounting, HRA) as well as the literature in Human Resources (HR). We then present the empirical study. The broad research questions were: how HR managers and those who had been on international assignments (repatriates) defined and calculated ROI; how intangibles were treated; and what was the role of the HR department in this process. We then present the key findings: a) the lack of formal systems for calculating ROI; b) a focus on identifying quantifiable, identifiable monetary costs and benefits and; c) a lack of systems to capture and transfer intangible outcomes such as knowledge. We conclude with implications for future research.

Literature Review

A commonly accepted economic definition of capital is “that which has been invested” (Schuller 2007, p.23) on which the firm seeks to generate a return. Human capital has been defined as the source of income embodied in the individual employee (Lev& Schwartz 1971). A firm's stock of human capital is therefore the sum of its employees' human capital. Many, if not most, accountants acknowledge that human capital is part of the capital of the firm. Flamholtz, Bullen and Hua(2003, p.22) acknowledge that “there ought to be no doubt that they [human resources] are indeed economic resources and a form of capital – human capital”. While there may be acceptance of human resources as being part of the firm's capital, few accountants accept that it should be included in accounting reports and even fewer agree on how it should be done. This is not surprising given that financial reporting has traditionally been based on principles of reliability, verifiability and objectivity. The debate has generally centred on whether human capital can be classified as an asset and how it can be measured. While authors such as Lev and Schwartz (1971) and Flamholtz et al. (2002; 2003) have suggested methodologies for valuing human capital to enable it, like other forms of capital, to be incorporated into financial accounts, it is fair to say that the acceptance and adoption in practice has been limited. In the following section, therefore, we provide a brief review of the debate surrounding measuring and reporting human capital.

Human Capital

In the editors' introduction to the launch of the *Journal of Human Capital*, Ehrlich and Murphy (2007, p.1) recount how human capital theory has evolved over four decades into “one of the most universally accepted concepts in economics and other social sciences, especially as a driving force in the ‘new information economy’”. Human Capital theory attempts to explain differences between human and nonhuman capital, in part due to a perceived need to measure investment in national education and industrial training (Wang, Dou & Ni 2002). Accounting and HR scholars are cognisant that “in a free society, the enterprise cannot own, only rent, its human capital” (Wiig 1997, p.401). This characteristic of human capital means the firm will suffer a capital loss - in the form of a cost (employment and training of replacement) or a lost opportunity (such as utilizing specialist expertise in a new way) - when

employees leave at the height of their abilities (Penrose 1959). This fact is acknowledged by some accountants such as Flamholtz (1999) but not reported or recorded in financial statements. Components of individual human capital, such as tacit knowledge, are hard to observe and measure. Further, human capital may generate sustained economic rent if it is firm-specific (and predominantly tacit), and barriers to competitors' appropriation, such as adjustment costs, exist (Hatch & Dyer 2004). Company training programs, work experience and accumulated knowledge improve an individual's human capital. Individuals trade their human capital for employment and rewards such as career advancement. Generally speaking, individuals can decide how, when and where they utilise their human capital: socialising the costs to the employer while privatising the gains. These features differentiate human capital from non-human capital and fixed assets.

A related concept, intellectual capital, has been defined as "the sum of human capital and intellectual property", (Flamholtz et al. 2003, p.21). Recently, Flamholtz (2005) has recognised the group and organisational elements, what he refers to as "human capital of the third kind", proposing that corporate culture be included in definitions of human capital. Flamholtz couches corporate culture in economics terms, referring to the economic value of individuals, groups and the total human organisation. This could be considered as similar to the concept of social capital, which organisational science scholars treat as a component of intellectual capital. For example, relational or social capital is defined by Nahapiet and Ghoshal as: "The sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (1998, p.243).

Human capital reporting has provoked discussion of aspects relating to the measurement of the value of a firm's workforce as well as measuring and amortising the firm's investment in human resources (Lev & Schwartz 1971). The objective is to find reliable methods that demonstrate how improvement in human resource management increases profit through activities such as management development programs. Quantifying these improvements, it is argued, has the added advantage of enhancing the value and relevance of financial and managerial accounting (Flamholtz et al. 2003). The challenge is determining how best to measure the firm's human resources and value.

The concept of measurement in human resources has increasingly become management oriented (Johanson & Larsen 2000) with approaches such as the balanced scorecard and triple bottom line reporting. While such advances are welcome, some authors propose that accounting has not responded adequately to the changing business environment. For example, Flamholtz et al. (2002, p.951) note that "organisations now need systems that continually assess and re-assess the people they employ, including their skills, talents and behavioural attributes, while paying attention to how human resources impact on the bottom line", as well as systems that capture knowledge and enable it to be retained within the organisation for future growth and sustained competitive advantage.

The reality is that measurement involving human resources is problematic. As Sveiby (1997) notes, early attempts to convert people or competencies into financial terms, although theoretically interesting, did not prove entirely useful to managers. While the accounting paradigm necessarily involves measurement, traditional accounting systems and approaches which emphasise objectivity and verifiability in financial reporting are ill equipped to do this well with respect to human resources. Some have proposed that, despite problems associated with measurement, the act of measurement of itself is important. "The notion that what gets measured gets attention has long been noted in the literature" (Ridgway 1956 as cited in Berry et al. 2009, p.5). Flamholtz et al. (2002) and Scarbrough and Elias (2002) note that the process of measuring sends a message that people are valuable organisational resources and should be managed as such. Of course, there is some evidence that the act of measuring performance might have negative consequences on those being measured (such as lowering morale, affecting team solidarity, see for example, Kluger & DeNisi 1996)³ The view that

³ We thank an anonymous reviewer for drawing our attention to this.

people are valuable organisational resources is not new however, appearing in early HRA literature (Likert 1961; Odiorne 1963). The activity of measuring, however, assists in the process of continuously developing and refining our understanding of the productive role that human capital plays within particular settings. But as Flamholtz et al. (2002) rightly acknowledge, this should be irrespective of whether the costs and benefits are tangible or intangible. It is the identification which is the primary objective and the development of accurate and objective measurement techniques which flow from this that improves decision making.

Flamholtz et al. (2002) note that if management has gone through the process of measuring and thereby possesses HRA information, then many HR management decisions may have differing results than they would in the absence of such information. Zaunbrecher's study of the impact of HRA cost information on personnel selection decisions indicates that when HRA information is considered it impacts on decision making even when in conflict with traditional information (Spiceland & Zaunbrecher 1977; Zaunbrecher 1974). Similarly, Mayo (2005) notes that HR professionals need to understand the financial value chain - the monetary, human and technological inputs which go through organisational processes to create strategic outcomes. The issue for accountants and management is to understand and measure these stages of the value chain. "Indeed the better they do understand it, the more likely they are to see the gaps in traditional accounting – its inability to link cause and effect and to take account of both tangible and intangible assets in the value creation process" (Mayo 2005, p.32). As he notes, "it is well established that a share price is much more dependent on the quality of intangible assets (which build the future) than on profit history" (Mayo 2005, p.32).

Human Resource Accounting

In accounting, attempts have been made to give greater consideration to the role of human resources, principally through the evolution of HRA. The importance of accounting's engagement with human resources has been noted by Flamholtz et al. (2002, p.947) "...if HRA can demonstrate that improvement in human resources management enhances profits, then management will integrate human capital implications in their decision making to an enhanced degree".

The American Accounting Association (AAA) defines HRA as the process of identifying and measuring data about human resources and communicating this information to interested parties (AAA 1973 as cited in Flamholtz 1999). This definition suggests that HRA is a tool that can be used for reporting people as organisational resources in both financial and managerial accounting terms (Flamholtz 1999), the objective being to quantify the economic value of people. As Flamholtz et al. (2002) argue, HRA has three major roles: to provide organisations with objective information about the cost and value of human resources; to provide a framework to guide human resource decision making; and to motivate decision makers to take a human resource perspective. The traditional focus of accounting has been on numbers not people; in practice this has meant that if dollar values cannot be assigned to transactions objectively then they are of secondary importance. Toulson and Dewe (2004, p.87) argue that "the tension between accounting for human resources in financial terms and the importance of reconceptualising measurement into a managerial decision-making tool" will continue at the risk of reflecting "debates of the past rather than the vision of the future". Measurement is therefore only one part of the picture and as Wood (1999, p.369) points out, "the terrain of debate is more open and muddier than is often presumed". The intangible nature of human performance has meant that the debate can become bogged down, becoming 'measurement for measurement's sake', thus losing the ability to motivate top management to take a human resource perspective in their decision-making.

Generally accepted accounting principles are based on objectivity, reliability, and verifiability in measurement in order to facilitate comparability. By their very nature human assets are difficult to report objectively, as the company does not own, but only rents, them for an indefinite period of time. This presents a conceptual dilemma. International Accounting Standard IAS 38 specifies that a

company can recognise an asset if it is: identifiable, controlled, it is probable that future benefits specifically attributable to the asset will flow to the enterprise, and cost can be readily measured. It also requires the following items to be expensed: internally generated goodwill, start-up, pre-opening and pre-operating costs, staff training costs, advertising cost and relocation cost.

With respect to providing information on the cost and value of human resources Lev and Schwartz (2001) and Flamholtz et al. (2002) note that items are often expensed rather than capitalised, reducing the net income of the company, because of measurement difficulties. These measurement difficulties emanate from the uncertainty of the future benefits from the investment and the inability of the organisation to exclude others from these benefits – e.g. expenditures for employee training are expensed because the organisation does not have a legal claim to the employee's future services.

Roslender (1997, p.9) notes that comparatively little progress has been made into “taking humans into account” and that the major reason for this is that the “worth of employees has hitherto been too closely bound up with the problematics of financial accounting and financial reporting” ... “this has resulted in the widespread practice of conceptualising employee worth in terms of the hard accounting numbers normally associated with the discipline”. Some value based models have attempted to resolve this problem of measuring human costs by assigning probabilities of exit together with probabilities of promotion, mortality and future wages (Lev & Schwartz 1971). Flamholtz et al. (2003) show how a “stochastic rewards valuation” model can be used to assess the ROI for investment in management development. In essence their model is an extension and refinement of the Lev and Schwartz model, accounting for how people can be expected to move through the organisation.

Lev and Schwartz (1971) note that the growth in physical capital has explained a relatively small part of the growth of income in most countries. Others such as Mouritsen, Bukh and Barr (2004) recognise that traditional assets often represent a small fraction of the firm's market value. These observations have led to the development of another approach to the HRA dilemma in the form of the intellectual capital statement. Mouritsen, Larsen and Bukh (2001, p.735) argue that “since the balance sheet accounts for all physical capital, the difference between market values and book values expresses intellectual capital”. They argue that “accounting for intellectual capital will assist managers or investors to understand how their resources - many of which are intangible - create value in the future and thus show where firms' intellectual capital is hidden”. In a later paper, Mouritsen, Bukh and Barr (2004, pp.46-47) acknowledge that “traditional financial statements do not provide the relevant information for managers or investors to understand how their resources – many of which are intangible - create value in the future”. To help “bridge this gap” they propose the use of intellectual capital statements to provide information about “how intellectual capital resources create future value ... the firm's strategy for managing knowledge and the activities initiated to pursue the strategy are documented and explained”. It could be argued that the approach adopted by the intellectual capital statement is in keeping with the general philosophical underpinnings of accounting. These authors consider that:

Intellectual resources comprise the firm's knowledge. In a business context this knowledge is used to improve a firm's innovation capability, processes and performance. However, knowledge is 'intangible'. Therefore it has to be translated into knowledge resources that can be pointed at so it is possible to say this is knowledge (Mouritsen et al. 2004, p.49).

However, this approach only tells one part of the story. It does not include factors such as recruitment cost, advertising and relocation which may ensure better hiring and firing decisions.

Even given attempts to resolve this problem, and despite the long held view of human resources as valuable human assets, HRA is still a relatively small area of interest within Accounting. Practitioner accountants note the importance of Human Resources to firm effectiveness and success. However the lack of generally accepted measurement techniques has restricted its implementation and led to HRA

being treated as a side issue at best. We now take the case of measuring return on investment (ROI) from a discrete activity – that of posting staff internationally - to demonstrate how applying a standard accounting metric to a HR situation exposes the measurement dilemmas discussed above, and also provides insights into the link between HRA and HRM (Lewis & Heckman 2006).

Applying ROI to a HR Activity: An Illustrative Case

The empirical study of nine multinational firms used an interpretative approach. Five Finnish and four Australian firms were selected by purposeful, intensity sampling which seeks excellent or rich examples of the phenomenon under study (Patton 1990). Firms were selected by invitation and covered a spectrum of industries: construction, mining/metallurgy, consulting, automotive, beverages, forestry, and electronics. They vary in size (medium to large) ; geographical spread; maturity in terms of international experience, and stage of international expansion. One is the Australian subsidiary of a large European based firm. Two of the Finnish firms are divisions within a diversified group. The Finnish study was conducted by a single researcher while the Australian study was conducted by two researchers, during 2006 and 2007. In total, 13 HR personnel and 47 repatriates (former assignees) were interviewed. The organisational perspective is obtained through semi-structured interviews with the HR directors (or those responsible for managing international assignments) in each of the participating companies, and analysis of company documentation (company policies, procedure manuals and website information). Each company was presented with a summary report for factual verification.

Interviews were conducted with at least five repatriates from each of the nine companies to obtain the individual assignee's perspective. It was important to include repatriates given their central position as "human assets" in the context of measuring value. As indicated in Table 1 the majority had been on their first international assignment (33 compared to 14 who reported more than one international assignment). In keeping with global trends, in our sample, males outnumber females (39 males, 8 females); and single-status is outweighed by those accompanied by at least spouse or partner. The length of assignment varied, though the duration tends to be over one year for the majority. Destination countries include Chile, England, Germany, Hong Kong, Indonesia, Japan, Malaysia, United States, Hungary, China, Sweden, Brazil, Thailand, Austria, France, and Peru.

The semi-structured interview guides are consistent; with similar questions to allow for within and across company data analysis while retaining the flexibility to respond to emerging themes and issues raised by participants. Questions are derived from the general expatriate literature. Interview items are of an exploratory nature related to the following topics: defining and measuring ROI; the purpose of the assignment; repatriate motives for acceptance; identifying tangible and intangible costs and benefits; and how the company manages the various activities related to the assignment process (such as selection, pre-departure training, compensation and repatriation). Interview data is supplemented by documentation in the form of company policies, procedure manuals and website information as part of data triangulation.

We use an abductive reasoning approach that "allows for a more central role for empirical research in the generation of ideas as well as a more dynamic interaction between data and theory" (Coffey & Atkinson 1996, p.156). We did not commence without *a priori* theoretical categories (i.e. inductive), nor did we set out to test or replicate theory (deductive). Rather we used an existing body of literature as our starting point, but then sought to further develop it (Dubois & Gadde (2002). The abductive reasoning approach requires the researcher to iterate between data and theoretical constructs - an approach which encourages the crafting of a narrative that incorporates "theoretical significance with real-life significance" (Golden-Biddle & Locke 2007, p.57). The pattern matching technique is used to analyse the data – a process whereby data on the phenomenon is examined on a case-by-case basis, with the emerging patterns or themes validated by conformance or deviation from a predicted

pattern (Yin 1994). Process validation is enhanced through researcher triangulation whereby researchers separately coded the transcripts for topics and themes, before comparing and cross-checking for consensus (Andersen & Skaates 2004). There was little discrepancy between researchers and agreement was reached through discussion. Data is grouped into agreed categories (codes), based on topics covered in interviews – for example, reasons for the international assignment, tangible and intangible costs and benefits, and career expectations. As Coffey and Atkinson (1996, p.31) note, coding is “about breaking the data apart in analytically relevant ways in order to lead toward further questions about the data”. This iterative process leads to a second round of data examination that enables the identification of new emergent themes surrounding the limitations of ROI as a measure, the role of the HR function, and repatriate knowledge accumulation and career capital.⁴

Table 1: Assignee Profiles and Motivations

	Finnish sample	Australian sample	TOTAL
Gender			
Male	23	16	39
Female	4	4	8
No. of IAs			
First	18	15	33
More than one	9	5	14
Length of assignment			
More than a year	21	15	36
Short term	6	5	11
Purpose of assignment			
Position filling	23	13	36
Management development	1	4	5
Organisational	3	3	6
Motivating factor			
Career Development	5	12	17
Opportunity to live and work overseas	12	8	20
Challenging job	8	4	12
Financial gain	5	1	6

Findings and Discussion

The use of international staff transfers or international assignments has been the subject of much research in the international management and HRM fields (for a review, see Harzing 2001). Although not a question explored in the HRA literature, international staff transfers are considered by many firms as a necessary expense arising from the decision to fill a position with an expatriate rather than a local hire. On the other hand, some firms consider the international assignment as an investment used to groom junior and middle-level employees; or as a necessary support for international expansion goals. Of course, these purposes are not mutually exclusive. The strategic goals of position filling,

⁴ Further details and copies of the semi-structured questionnaires may be obtained from the authors.

management development, and organisational control are reflected in our study, although the majority (76.7 percent) are position filling.

Given the reported lack of interest in ROI mentioned above, it was not unexpected to find that the nine companies in our study do not have a formal system in place to calculate ROI. While HR managers are aware of ROI as a useful metric, there are major concerns about its ability to capture the intangible costs and benefits involved, and the period over which to consider costs and benefits. One example provided is how to measure the opportunity costs of employing an expatriate over a local, as there are costs associated to the sending unit through not having that person’s contribution. The attraction of using an accounting metric like ROI is partly due to cost containment pressure. As one Australian HR manager explains: *“There’s always a call for HR to be more financially considerate of what’s happening and to link our programs with a specific outcome”*. A major part of the predicament our HR interviewees face is the nature of what they are trying to measure. There is general consensus that tracking assignment costs is important and all HR interviewees could itemise direct costs associated with the international assignment. The key issue relates to the non-monetary variables identified by participants. Examples of responses are listed in Tables 2 and 3. Repatriates also comment on how difficult it would be for an organisation to monetise these items, given their general intangible nature.

The assignment of administrative costs is an issue in many cases as several business units and external service providers are involved. It is general practice, particularly in larger firms, for international assignments to originate in either the sending or receiving section of the multinational. The HR department becomes involved once a candidate is selected: administrating company international assignment policies, overseeing in-house activities (such as pre-departure briefings and cultural awareness training) and external service providers (who commonly handle relocation and taxation aspects); and generally monitoring the process. The subsidiary or local office HR staff may assist in housing and other settling-in issues. Upon completion, HR assists in the repatriation process. This is indeed the case for the nine multinationals in our study.

Table 2: Intangible Costs of International Experience

COMPANY PERSPECTIVE (HR managers)	INDIVIDUAL PERSPECTIVE (Repatriates)
The administrative costs of running an international assignment program	The effect of not working on the accompanying partner’s own career
Recruiting a successor (in sending unit)	Adjustment difficulties particularly for the family
Turnover of returning staff who leave post completion	Relocation stress
Disruption at the host unit caused by cultural insensitivity of the IA.	Lack of a social life for those who were single-status
Opportunity cost of employing an expatriate over the cost of a local hire	Loss of family back-up and support.

Table 3: Intangible Benefits of International Experience

COMPANY PERSPECTIVE (HR managers)	INDIVIDUAL PERSPECTIVE (Repatriates)
Knowledge and skills transfer	Personal growth <ul style="list-style-type: none"> • Improved language skills • Greater intercultural understanding
Relationship building	Work-related personal benefits <ul style="list-style-type: none"> • Developing company networks • Insights into other parts of the business
Supporting company objectives <ul style="list-style-type: none"> • Transfer of corporate culture • Building attachment to the global organisation 	Family benefits <ul style="list-style-type: none"> • exposure to other cultures • opportunities for travel

In interviews, there is greater discussion about monetisation and measurement when itemising intangible benefits. As Table 3 shows, the benefits to the organisation could be grouped into three categories. First, knowledge and skills transfer, as the international assignment, as a form of job rotation, enables the transfer of know-how to and from dispersed units and thus increases business competence. Second, relationship building through the development of cross-border and cross-unit networks, particularly informal, enhances information flows. Third, developing internationally capable employees is perceived to benefit the organisation through the transfer of corporate culture, building attachment to the global organisation to improve integration and control.

From the individual's perspective, career development and financial gain are traditionally given as the primary reasons for accepting an international assignment (Dickmann et al.2008). For the 47 repatriates in our study, potential career capital is ranked highly as a motive to accept an international assignment, though more so for the Australians. International experience is linked to personal development (including accompanying family members where applicable) as well as for career progression. As Table 3 depicts, indirect (or intangible) benefits includes aspects such as: improved language skills, insights into other parts of the business, developing company networks and broader contacts, exposure to another culture, and developing local staff. Investment in human capital is a consistent theme. For example, 57.4 percent of the 47 repatriates interviewed are certain that their international experience delivered positive career outcomes; and 55.3 percent report they benefited financially (interviewees could list multiple items). Some were not sure, or felt that it was too soon to judge given the relatively short time since repatriation. These responses, though, demonstrate how individuals can assess the broader benefits and informally calculate potential career capital.

There is agreement that successful completion of the assignment against formal performance objectives is an appropriate way to measure ROI. This, though, depends on tangible objectives being set, and that appropriate performance appraisal systems are effectively utilised. The challenge is that usually HR managers rely on line managers, including those to whom IAs report in the foreign location, to effectively conduct these appraisals. Identifying and measuring assignment benefits is complicated as these can accrue to one or all of the parties involved; that is, the receiving unit, the sending unit upon the person's repatriation, the whole company, and the individual assignee. Moreover, operating in the global context highlights how performance measurement is not conducted in isolation and places particular demands on a performance management system (Dowling & Welch 2004). Such

aspects raise further questions concerning the ability of the ROI metric to accurately measure this complex situation; and how the organisation can ensure that the person remains after repatriation so that there is a possibility to recoup the investment. Our HR participants are cognisant of the difficulties of placing a numerical value on intangibles even when these can be isolated or defined. Thus, our findings, though derived from a small sample, highlight the complexities surrounding valuing return on investment in human capital from the organisation's perspective.

There is less ambiguity in the way in which individual repatriates approach ROI from an international assignment. Asked if they conducted a ROI calculation, the majority indicate 'yes' and 26 of the 27 Finns (96 percent) assess that on balance their ROI is good, with one deeming it satisfactory. The Australian group is more divided, with 12 of the 20 interviewees considering their ROI positive, two negative, and the remaining six unsure, as their recent return did not allow them to make an accurate assessment in terms of post-assignment benefits. Generally, the cost-benefit analysis is weighed against the reasons for accepting the assignment. Again, this result is not surprising given that effectively we are dealing with human capital. A confirming finding is the importance of the position upon repatriation. Prior research has identified various career aspects related to repatriation, such as suitable re-entry positions not immediately available; or the repatriate reassigned to a position that does not provide expected career progression (Stroh 1995). If the expected career outcomes are not forthcoming within a reasonable timeframe, then the repatriates are vulnerable to exit. Of the 27 Finnish repatriates, 12 had considered resigning at the time or just after repatriation, prompted by the desire to find more challenging work elsewhere. For example, a Finnish repatriate explains: *"None of the promises made to me before I left [for the foreign assignment] have been realized... In my current job, I'm not able to use my new abilities"*. While the 20 Australian repatriates do not explicitly mention considering leaving the organisation, seven were initially dissatisfied with their re-entry position. One explains: *"You get depressed... You feel almost like no one really appreciates it professionally even when you get back. You have all this knowledge [not being used]"*. Another interviewee who was an external hire on contract was not re-employed (made redundant), and three drove the re-entry process themselves based on what they had witnessed happening to others. The remainder either had their assignments curtailed to fill vacant positions back in the home country or were satisfied with their re-entry positions.

Repatriate turnover means that competing firms reap the benefits of a substantial investment in intellectual capital especially in cases where the knowledge, skills, social networks, and competence are non-firm specific and immediately expropriated by rivals (Hatch & Dyer 2004). Those who remain in the organisation may not be motivated to share (Lazarova & Tarique 2005), and treat their human and social capital as a private good potentially to be traded to a new employer. Acceptance of high repatriation turnover decreases organisational capital as exiting employees take tacit knowledge with them. Their replacements, as new employees, lack the requisite firm-specific knowledge and skills, at least in the short-term, thus raising costs (Hatch & Dyer 2004). Under-utilisation of repatriates may have negative consequences, such as, increased opportunistic, transactional, behaviour as a result of re-entry dissatisfaction; and loss of international skills and knowledge through obsolescence or transfer decay (Saks & Belcourt 2006). The use of the ROI fails to capture the true worth of an international assignment, with its tendency to be backward looking in terms of performance, rather than including future returns (Caldwell 2008). A broad metric, such as economic returns, may be better placed to capture both tangible and intangible outcomes over the appropriate time span (Wang, Dou & Li 2002). However, in their study of intellectual capital and performance, Youndt, Subramaniam and Snell (2004, p. 356) use equity, asset and market-based measures and find that these traditional measures tend to "overstate the performance impacts of intangible assets because they understate organisations' capital bases". These authors concede that economic value added (EVA) as a performance in the right direction but it "still relies on a firm's capital structure to compute". Youndt, Subramaniam and Snell (2004 p356).

Another key finding from our study is that HR performs the role of bureaucratic administrator. Our discussions with the HR staff in the nine companies who handle international assignments reveal a general limitation in what they can affect. The various line managers – project managers, subsidiary and functional managers – determine the need for an international assignee and, to a certain extent, select the person to fill the position, and are active in reassignment decisions. For example, in one Finnish case, the finance department monitored assignment costs across the various company units, and could restrict the use of expatriates if costs were exceeded. Working within a narrow domain means ROI measurements are restricted to what HR managers can directly influence, but this does not indicate the participants had tunnel vision (Vakkuri & Meklin 2006). Instead, HR managers we interviewed are highly cognizant of the need to manage repatriate career expectations and to convert human capital (repatriate know how) into organisational capital. There is an element of frustration from the lack of formal authority to influence and to hold line managers accountable for repatriate turnover. This is particularly the case for three of the Australian HR managers, who are middle managers within their respective HR departments and rely on the status of their direct reports to advocate repatriation issues at top management meetings.

Conclusions and Implications for Further Studies

Toulson and Dewe (2004) note that, as a result of globalisation, there has been a gradual realisation amongst businesses that competing through cost is not enough and future profitability and competitive advantage lies in the skills of employees and the development of their capabilities. They also consider the changing nature of management, with managers increasingly becoming facilitators of knowledge intensive companies. Given this context, one would expect that multinational firms would have sophisticated systems to measure the value gained from utilising international assignments. Our findings, as well as those reported by consultancy surveys (such as GMAC and KPMG), suggest otherwise. Interview data reveals that intangible costs and benefits are problematic when applying such a metric; that much of the outcome from the assignment is intellectual capital, in its broad sense, and therefore difficult to isolate and effectively measure.

Measurement problems do represent methodological challenges but “should not prevent the study of human assets” (Coff 1997, p.396). March (2006) reminds us that variables that cannot be measured may be more valuable than those that can. In a similar vein, Godfrey and Hill (1995, p.531) recognise the danger of conveniently ignoring “un-observables”, which they define as resources relevant in explanation but not directly measurable. They use the term “scientific error” to describe the disregard of what cannot be observed and therefore measured empirically; this error is to equate “*measurability* of a construct with its relevance in *explanation*” (their emphasis). As Lewis and Heckman (2006) point out, a fixation with elegant analyses and exacting measures that fail to address decision-makers’ needs may be counterproductive, neglecting the balance between precision and usefulness.

A starting point could be HR scholars and practitioners working with their HRA colleagues to develop ways in which the employee component of intellectual capital can be included in company reports in a meaningful way, consistent with the Balanced Scorecard approach. In their paper published in 1971, Lev and Schwartz note that non human capital is reported in financial statements while human capital is “totally ignored by accountants” (p.103), despite modern economic theory treating human capital on a par with the other forms of earning assets; land and capital. It could be argued that not much has changed since. A major factor, we suggest, is the, generally speaking, low status of the HR function. Our findings clearly indicate that HR’s role in critical operating decisions is minimal. Line managers are regarded as potential allies in raising awareness of the intricacies surrounding the use of international assignees, particularly when it involves measuring non-monetised elements. The stumbling block to cooperation is the concern that adopting accounting based techniques may make the

HR department irrelevant. A common recommendation is for HR managers to “establish their credibility by making the function more accountable in financial terms” (Bontis & Fitz-enz 2002, p.245). However, much of what HR does is subject to the actions of others outside the HR department over whom they have no control. HR cannot hold line managers, including accountants, responsible for employee related decisions that may impact upon the financial well-being and credibility of the HR department. Armstrong (1995) notes that the greater influence of accountants on management and the widespread use of management accounting techniques are forces with which human resource managers must struggle. HR professionals and academics are aware of the growing need to demonstrate how HR systems and practices contribute to the corporate bottom line. Some are wary of wholeheartedly embracing accounting techniques; that an alliance between HR and HRA may prove to be “a dangerous liaison” (Pfeffer 1997, p.363) that has the potential to further marginalise the HR department. Reducing people to “objects” may also be of professional concern, given that one of the roles of the HR department is that of “employee champion” (Ulrich 1997).

Playing the numbers game can only be mutually beneficial if both disciplines and professions are united in an overall purpose. While not specifically explored in this study, it is feasible to suggest that HR managers responsible for international assignments would be positive towards a ‘strategic alliance’ with their accounting counterparts in developing appropriate metrics for human resource valuation. This is in keeping with the three roles of HRA identified by Flamholtz et al. (2002), especially in providing a framework to guide decision making involving a firm’s stock of human capital.

Our study into ROI is restricted to a discrete activity – that of international staff transfers – drawing on data from a small exploratory study and our findings need to be treated with some caution in terms of generalisation. However, our results suggest the need for further work in the field of accounting for human resources. In particular we note the importance of developing meaningful ways of including the employee component of intellectual capital in company reports. As we mentioned at the start of this paper when we quoted Flamholtz, Bullen and Hua (2002, p.947), accounting for human resources has important implications for external financial reporting and has potentially even greater significance as a managerial tool in internal human resource management decisions.

One area for further research is the time-frame involved in human capital investment. We could have undertaken a similar analysis to that of Flamholtz et al. (2003), using their stochastic rewards valuation model for ROI for management development. This requires access to data on how individual career trajectories would change as a result of an international assignment, expected tenure post repatriation and identification of human capital related variables; and would necessitate tracking a selected cohort of individuals over a long period of time. The dearth of literature on the career outcomes of international assignments highlights the research challenges such a study would involve (see for example, Dickmann et al. 2008). However, such studies could provide verification of components of the Flamholtz et al. ROI model, particularly estimating expected tenure post repatriation; with an added advantage of identification of variables associated with human capital that may be quantified.

Another obvious area for further investigation is that of cross-discipline research. One of the authors of this article is from the accounting discipline while the other is from HR. The differing perspectives related to human resources and research methodology provoked spirited dialogue that crystallised conceptualisation and data analysis, and proved to be a mutually beneficial exercise in building professional respect. Cross-discipline research may expose accountants to broader organisational concepts beyond that of traditional managerial accounting literature, thus gaining insight into HR activities such as performance management relevant for developing more meaningful metrics. The HR field is grappling with conflicting, inconclusive results from studies attempting to demonstrate a link between HR systems and organisational performance. Though familiar with general accounting

concepts and techniques, HR scholars may have much to gain working alongside accounting colleagues.

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