Non-disclosure of human capital-based information: theoretical perspectives

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Abstract

Purpose – The purpose of this paper is to discuss a framework of accounting theoretical bases that could promote research into little understood areas of human capital accounting.

Design/methodology/approach – The possible forces that hinder greater disclosure of human capital-based information are analyzed by reviewing several theoretical viewpoints that offer a framework of different possible reasons for the low frequency of human capital-based disclosures.

Findings – The paper explores several possible reasons for the reluctance of firms to disclose greater amounts of human capital-based information, from the perspective of relevant theoretical bases. The predominant reasons may differ in different circumstances, industries and environments.

Research limitations/implications – The paper explores theoretical bases that explain the barriers to widespread reporting of human capital-based information. The theoretical bases discussed are not empirically validated.

Practical implications – The validation of the theoretical bases explored in this study, and the possible uncovering of new bases in the future through empirical studies, will enable academics, policy makers and accounting standard setters to better understand the reasons for the limited disclosures of human capital-based information by listed firms to capital markets. This will help in the promulgation of widely accepted accounting standards for the disclosure of human capital-based information, which address and overcome the forces that currently hinder the reporting of human capital-based information.

Originality/value – This is the first paper that explores a framework of several pertinent theoretical viewpoints that specifically address the non-disclosures of human capital-based information to capital markets.

Keywords Human capital, Accounting, Intangible assets, Intellectual capital, Human resource accounting

Paper type Research paper

Introduction

A nation's intangible assets reflect the competencies and capabilities needed for national economic growth (Malhotra, 2003). It has been acknowledged that intangible assets are important for wealth creation and increasing national incomes ((*The*) World Bank, 1998). In corporate entities, intangible assets are important for ensuring growth and stability, which in turn enables meaningful employment and career growth opportunities that boost the economic growth and stability of nations.

Despite the increasing recognition given to corporate intangible assets in the literature, there has been limited progress in accounting for these assets in corporate

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reports (International Federation of Accountants, 1998; Lev, 2001; Kannan and Aulbur, 2004; Guthrie and Yongvanich, 2004; Andreou *et al.*, 2007; Choong, 2008). The market to book values of US firms rose from 0.81 in 1973 to 1.69 in 1992 (Lev and Zarowin, 1999), indicating that substantial portions of assets that contribute to the market values of listed firms are absent from their balance sheets. Eckstein (2004) posits that the lack of internationally accepted accounting standards for the disclosure of intangibles undermines the credibility of corporate accounting reports. Studies of classification and accounting for intangible assets, including reasons for the non-disclosure of intangibles in corporate reports, are important for addressing this shortcoming in accounting standards.

The urgent need to understand these intangibles, and formulate approaches for identifying, measuring and reporting them, has caught the attention of corporations, researchers and governments worldwide (Canibano *et al.*, 2000; Upton, 2001; Johanson *et al.*, 2006). Some innovative reporting approaches by private firms, such as intellectual capital statements, have also become well known, indicating the great importance placed by the international business and research community on effective reporting of intellectual capital. In this context, Upton (2001, p. 18) mentions that the intellectual capital statements of the Swedish insurance company, Skandia, are the "best known" of the new intellectual capital reports. Other researchers have studied Skandia's efforts in detail, and have also considered similar intellectual capital reports in other nations. For example, Mouritsen *et al.* (2001) consider Skandia's intellectual capital reports and Mouritsen *et al.* (2002) study intellectual capital statements of Danish firms.

Choong (2008) mentions that intangible assets studies have converged toward a three element framework covering human[1], organizational and relational capital. Human capital refers to the capabilities and skills possessed by the employees, organizational capital pertains to internal intangible assets (e.g. proprietary computer software) and relational capital that pertains to intangible assets that are external to the organization (e.g. a loyal base of customers).

Abhayawansa and Abeysekera (2008) employ a variant of this framework in an analysis of extant intellectual capital research. These authors subdivide intellectual capital into human capital, internal capital and external capital. Studies of intellectual capital disclosures (Table I) indicate that human capital is generally the least disclosed amongst these intellectual capital categories (Abhayawansa and Abeysekera, 2008). In Finland, human capital-based external reporting has been attributed to about only 20 per cent of private companies (Ahonen, 2009; Ahonen and Grojer, 2005), again reflecting the relatively low levels of human capital-based information reported in Table I.

Four categories of intangible asset measurement models are found in published literature, namely: scorecards, direct intellectual capital estimates, market capitalization and return on assets-based measures (Malhotra, 2002; Sveiby, 2007). Scorecards measure and report different components of intellectual capital through a variety of financial and non-financial metrics. Direct intellectual capital estimates provide monetary values for each component of the intellectual capital, and these values may be aggregated to provide a total intellectual capital value. Market capitalisation methods are based on the difference between the market and book values of a firm's assets. Return on assets-based measures divide the above average earnings of a company with

Table I. Studies of disclosure of intellectual capital in corporate annual reports

Study	Country	External capital (%)	Internal capital (%)	Human capital (%)
Abeysekera and Guthrie (2005)	Sri Lanka	44	20	36
April *et al.* (2003)	South Africa	40	30	30
Bozzolan *et al.* (2003)	Itlay	49	30	21
Brennan (2001)	Ireland	40	30	30
Goh and Lim (2004)	Malaysia	41	37	22
Guthrie *et al.* (1999)	Australia	40	30	30
Oliveira *et al.* (2006)	Portugal	48	25	27
Oliveras and Kasperskaya (2005)	Spain	51	28	21
Steenkamp (2007)	New Zealand	36	11	53
Sujan and Abeysekera (2007)	Australia	48	31	21
Vandamaele *et al.* (2005)	The Netherlands, Sweden and UK	40	30	30

Source: Abhayawansa and Abeysekera (2008)

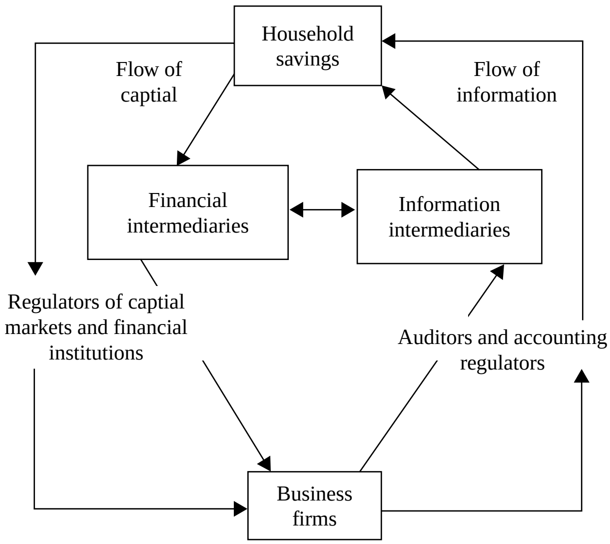
the firm's cost of capital, including applicable interest rates, to derive a value for the intangible assets.

Some recent work has explored valuation of specific intangible assets components, in contrast to the idea of either finding aggregate values (such as market values less book values of firms) or valuing individual components and then aggregating them. For example, Samudhram *et al.* (2008) consider the valuation of a component of intangible assets, namely: human capital, specifically. In essence, these authors consider a human capital valuation framework, which may also be extended to other specific categories of intellectual capital.

Published studies indicate that human capital is generally the least frequently disclosed category of intellectual capital (Abhayawansa and Abeysekera, 2008). This paper explores the reasons for such non-disclosure, with the idea that an understanding of these reasons will help in the formulation of regulations that could promote widespread human capital-based reporting. Disclosure of human capital-based information is important for the capital markets to work efficiently. Capital market funds flow from individuals and households to business firms, through financial intermediaries, overseen by regulatory bodies, including legislative bodies (Figure 1).

Ideally, the providers of the funds would choose to invest in firms that perform well and shun firms that perform poorly. Investors require high quality, reliable information to be able to choose the better firms, including information regarding the firm's human capital.

The managers and directors of firms have better access to information regarding the firm because they are closely involved with the running of the day-to-day business. Outsiders, including investors, would need to spend enormous amounts of time and effort to get this information regarding the performance of the firm, to make informed judgements. This information asymmetry, where managers of businesses have better information than investors, creates two problems (Healy and Palepu, 2001; Scott, 2003). First, it allows managers to garner wealth at the expense of shareholders (Jensen and Meckling, 1976), by covering up business problems, which only come to light when



Source: Healy and Palepu (2001)

Figure 1.
Disclosure of corporate information and flow of capital to firms

the firm eventually collapses. Second, it creates inefficiencies in resource allocation decisions of external stakeholders, where investors, misled by false reports, invest in poor performers at the expense of healthy firms. This misallocation of resources deprives healthy firms of vital funding (Healy and Palepu, 2001; Scott, 2003).

Both of these problems can be overcome by the provision of the requisite information to investors[2]. The non-disclosure of human capital-based information contributes to the information asymmetry problem, which in turn leads to issues arising from inefficient resource allocation. Such inefficient resource allocation leads to the proliferation of poorly performing firms at the expense of good-quality firms, eventually retarding national economic growth and performance. On the other hand, widespread reporting of pertinent human capital-based information will help to overcome the problems that result from information asymmetry. As such, it is important to understand and overcome the barriers to widespread human capital reporting.

While some studies have explored the content of human capital disclosures and the reasons for such disclosures (Abeysekera and Guthrie, 2004; Abeysekera, 2008), there are virtually no published studies in international accounting journals that explicitly consider the reasons for the non-disclosure of human capital-based information (Guthrie and Murthy, 2009), particularly from the perspective of pertinent theories. This paper addresses this gap in the literature. It discusses relevant theoretical bases for the non-disclosure of human capital-based information. This discussion helps to extend human capital accounting research in this specific area. It also provides an impetus for further research in this little explored area, and seeks to inform policy makers and regulators of the potential underlying motivations that hinder greater disclosures of human capital-based information. By understanding the reasons for non-disclosure of human capital-based information, it might be possible to formulate regulations that address the concerns of corporations, and thereby promote widespread human capital-based reporting.

The remainder of the paper is organised as follows. The next section reviews the human capital accounting literature. This literature review is followed by a discussion of several theoretical perspectives that consider why firms do not disclose much human capital-based information. This section is followed by a discussion of the limitations of this paper and future research. The final section concludes this discussion.

Literature review

The American Accounting Association defined human capital accounting as the process of identifying and measuring data about human capital and communicating this information to interested parties (American Accounting Association, 1973). According to Verma and Dewe (2004, 2008), this definition can be expanded to encompass Flamholtz's (1999) and Flamholtz *et al.*'s (2002) assertion that accounting for human capital fulfils three major functions:

(1) providing numerical information about the cost and value of people as organizational resources;
(2) serving as an analytical framework to facilitate decision making; and
(3) motivating decision makers to adopt a human capital perspective.

Such an expanded viewpoint is also espoused in the work of Abeysekera and Guthrie (2004) and Abeysekera (2008), where human capital is seen to consist of the combination of factors possessed by individuals and the collective workforce of the firm, including skills, knowledge and technical ability. Abeysekera and Guthrie (2004) and Abeysekera (2008) study the disclosures of this human capital-based information in corporate annual reports. The current study extends this work in that it explores the reasons for the non-disclosure of the same human capital-based information in annual reports. As such, for this study, human capital is defined as the combination of factors possessed by individuals and the collective workforce of the firm, including skills, knowledge and technical ability, following Abeysekera and Guthrie (2004) and Abeysekera (2008).

Accounting for human capital commences from the work of Hermanson (1963, 1964), and in the four and a half decades since the publication of Hermanson's work, many developments have taken place in accounting for human capital (Flamholtz, 1999; Flamholtz *et al.*, 2002; Roslender *et al.*, 2007; Roslender, 2009a, b; Abeysekera and Guthrie, 2004). Abeysekera and Guthrie (2004) summarise these developments by subdividing extant research in human capital accounting into three research streams. The first research stream considers human capital measurement models. The second research stream considers studies of the usefulness of human capital-based information. The third research stream covers studies regarding the disclosures of human capital-based information. These research streams are discussed below.

Measurement models of human capital accounting

The extant literature on accounting for human capital recognizes two types of models for the measurement of human capital, namely the cost-based and the value-based models (Sackmann *et al.*, 1989; Flamholtz, 1999). Cost-based models consider the costs, or inputs, incurred in developing human capital, including historical, current and opportunity costs. Value-based models consider the value of the human capital to the organisation, or outputs, and include monetary, non-monetary and mixed models. However, none of these models have found widespread acceptance and Theeke (2005) posits that the reporting of human capital is constrained by the lack of acceptable reporting models.

Samudhram *et al.* (2008) regard cost-based models, that is, human capital-based expenditures, as inputs for human capital development and value-based models as measures of outputs or benefits of such expenditures. Samudhram *et al.* (2008) propose a human capital valuation framework that guides the reporting of human capital, based on a consideration of human capital-based expenditures and the corresponding benefits.

Studies of usefulness of human capital accounting

These studies explore the usefulness of human capital accounting output for both internal and external users (Sackmann *et al.*, 1989; Johanson *et al.*, 1998; Flamholtz, 1999; Flamholtz *et al.*, 2002; Department of Trade and Industry (DTI), 2003b; Verma and Dewe, 2004, 2008). The earlier studies in this area employed experimental designs and surrogates, including students, for users. A weakness of these studies is that surrogates, such as students, may not respond in the same manner as seasoned professionals. However, later studies have employed surveys and interviews of professionals, such as working analysts. In general, human capital-based information has been found useful for both internal and external decision makers. Rimmel (2005) provides some insight into a potential expectations gap, whereby the users of corporate annual reports expect more disclosures of human capital-based information while the providers of such information prefer to provide relatively fewer disclosures.

Studies of disclosure of human capital-based information

The third research stream in human capital accounting research explores how corporations report human capital voluntarily in annual reports (Abeysekera and Guthrie, 2004). These studies employ disclosure indices and content analysis to ascertain the relative amount of disclosure of human capital in firms (Subbarao and Zeghal, 1997; Guthrie *et al.*, 1999; Guthrie and Petty, 2000; Brennan, 2001; Olsson, 2001; April *et al.*, 2003; Bontis, 2003; Bozzolan *et al.*, 2003; Goh and Lim, 2004; Oliveras and Kasperskaya, 2005, Abeysekera and Guthrie, 2005; Rimmel, 2005; Vandamaele *et al.*, 2005; Oliveira *et al.*, 2006; Sujan and Abeysekera, 2007; Abhayawansa and Abeysekera, 2008). These studies encompass developed (e.g. Australia, New Zealand and The Netherlands) and developing nations (e.g. Malaysia and Sri Lanka). They explore what kind of human capital-based information is being voluntarily reported and, in some cases, why. In general, this stream of research uses content analysis to study the type and amount of human capital-based disclosures in corporate annual reports of publicly listed firms.

In general, the voluntary disclosure of human capital-based information appears to be explained by the legitimacy theory, whereby larger firms tend to disclose such information to get the tacit approval of the society in which they operate. In essence, the firms appear legitimate in the eyes of the society since they appear to undertake activities that benefit the different layers of contemporary society, such as providing policies that result in a lack of gender bias in employment of the workforce.

A gap in the literature?

Guthrie and Murthy (2009, p. 135) review recent the human capital accounting literature and conclude that, based on a study of work published up to 2008, "there were no published articles that studied the forces hindering the disclosure of human resources information to capital markets". This study addresses this gap in the literature by exploring various theories that could explain this reluctance, by corporations, to disclose human capital-based information in external reports.

Systems oriented theories, such as stakeholder theory, legitimacy theory and institutional theory, have been used in recent research on unregulated external reporting (Deegan, 2006). In general, such theories can lead researchers to observe what has been published, and use this as a basis for exploring the underlying theoretical bases. It can also be concluded that firms may be motivated to voluntarily report certain information under certain conditions (e.g. mining concerns may showcase how they are working to protect the environment to counter negative publicity that their activities are environmentally destructive), while other firms in other industries may not be motivated to disclose pertinent information when certain specific pressures, such as a need to portray a positive image, are absent.

However, in the case where the pertinent information is not published, it is not possible to follow this method of studying the published materials (for example, by using content analysis) and working on the underlying explanatory theories, since no published material is available for the initial exploration. Moreover, these theories indicate forces that motivate voluntary reporting, and imply that voluntary reporting does not occur when such motivating forces are absent. Such motivating forces are identified through a study of voluntarily published external reports and the firms that publish such reports. Nevertheless, it is possible that there are forces that, in contrast, hinder voluntary external publication of certain information, such as human capital-based disclosures that are useful for capital markets. A study of voluntarily published information would not help to identify such forces, because nothing has been published.

The extant literature offers some pointers for the identification of such forces, however. Although no studies have explicitly studied the forces that "hinder disclosure of human capital-based information", Guthrie and Murthy (2009, p. 135), some information about these "forces" is found in recent research, namely, the UK government's initiative in accounting for people (DTI, 2003a), and associated consultation work (Foong *et al.*, 2003). These studies are based on surveys and interviews. An interesting finding in these studies was that 76 per cent of the human capital-based indicators that the publicly listed firms compile are not reported externally by the sampled listed firms.

Foong *et al.* (2003, p. 31) explore "obstacles to human capital [. . .] reporting" and mention that the human capital-based information is not "something that can be shared externally". Two important details are provided regarding why this information cannot be "shared externally", which provide clues to the relevant theoretical bases. The first of these details is the comment that "because such information may give important insight to competitors", concerns arise about reporting this information externally since "some of this information is about sources of competitive advantage and thus would not be appropriate for external reporting". The report does not delve deeper into this issue, which is not surprising, since "obstacles to human capital [. . .] reporting" is a relatively small part of a much larger report. Nevertheless, sufficient pointers are provided here for a deeper analysis of the little explored theoretical bases that relate to these findings, which can be expanded for further study.

In essence, this report indicates that human capital-based disclosures to external parties "give away sources of competitive advantage" and, as such, indicate that a firm's human capital is a source of competitive advantage. These comments correspond with the idea of human capital as a key source of competitive advantage, that has been articulated by Wright *et al.* (1994), within the context of the resource-based view (RBV) of the firm. Hence, it is worthwhile exploring the RBV further and consider its application in exploring the potential reasons for the relatively low frequency of human capital-based disclosures (Table I). The RBV is explored in this context in detail below.

The second detail from Foong *et al.* (2003, p. 31) regarding obstacles to human capital reporting is that human capital-based disclosures may "potentially [. . .] be negatively interpreted by external stakeholders such as [. . .] unions, employees, [. . .]". In general, these comments indicate that the considerations of the potential impact of such disclosures on unions and employees serve to discourage such reporting. This suggests the possibility that providing information regarding the importance of human capital, namely employees, of a firm somehow may lead to undesirable consequences. Perhaps, this information would support the unions and employees in bargaining for better wages, since this information makes the employees more aware of their significance to the firms, and provides irrefutable evidence of their importance in the creation of wealth. When these human capital-based disclosures are not externally reported, the unions and employees will perhaps be willing to accept lower wages, since they remain uninformed of their importance to the organisation. Such ideas are an aspect of critical accounting theory, where accounting output is seen as a tool for the wealthy and powerful to subjugate the poor and powerless. As such, the critical accounting theory is explored in detail below, in relation to human capital reporting.

Based on the reasoning given above, the RBV and the critical accounting theory appear to be the relevant theoretical bases for studying the reasons for the non-disclosure of human capital-based information. These theories are explored in detail below, in the novel context of human capital reporting.

Theoretical perspectives

Published literature indicates that some firms do disclose human capital-based information in corporate annual reports, but the frequency of such reporting is relatively low (Table I). There is practically no published work in international accounting journals that explicitly explores why firms do not disclose human capital-based information (Guthrie and Murthy, 2009).

In general, it is easier to work on why human capital-based information is disclosed than on why it is not disclosed. It is possible to identify what human capital-based information is disclosed, through techniques such as content analysis of corporate annual reports. Studies of the type, amount and quality of information that is disclosed, followed through with additional studies, such as interviews of managers of the firms that actually disclose the particular information, are able to provide clues and insights as to why certain kinds of human capital-based information are disclosed.

In the case of exploring theories that explain the non-disclosure of human capital-based information, techniques such as content analysis cannot be applied, since no information is available for analysis. Research that indicates that there is relatively low disclosure of human capital-based information in corporate annual reports (Table I) serves as a starting point. This paper proposes a way forward from this starting point by considering some theoretical perspectives that may be of value in exploring the reasons for the non-disclosure of human capital-based information in corporate annual reports. These perspectives have been touched upon in various papers and in different ways, as discussed below. However, there has been no paper that has integrated these ideas into a framework, especially in the context of human capital reporting, that could extend extant research on the non-disclosure of "human capital-based information to capital markets", Guthrie and Murthy (2009, p. 135). This research paper undertakes such integration, with the aim of providing a set of theoretical bases that may propel further research in studies pertaining to non-disclosure of human capital-based information.

As mentioned above, the reasons for the non-disclosure of human capital-based information may be analysed from several theoretical bases. These theoretical bases are the RBV of the firm and the critical accounting theory. These perspectives are discussed below. Within the RBV, however, two complementary viewpoints can be identified, which relate to firm strategy and concerns about competitors, respectively. These are also explored below.

RBV in studies of human capital

The RBV is generally credited to Penrose (1959), with other authors such as Rumfelt (1984), Wernerfelt (1984), Barney (1991, 1995), Dierickx and Cool (1989) being credited with helping to popularise this perspective (Wright *et al.*, 2001; Stiles and Kulvisaechana, 2003; Reed *et al.*, 2006). The RBV contends that firms are able to maintain a competitive advantage via assets that are valuable, rare, inimitable and non-substitutable (Wernerfelt, 1984; Barney, 1991). Valuable assets are able to provide future economic benefits. When the assets are rare, they are unlikely to be available to competitors. When the assets are inimitable, competitors cannot imitate them, and as such are unable to obtain future economic benefits provided by such assets. When these assets are non-substitutable, competitors cannot substitute them with other assets that can provide the same economic benefits.

In essence, the RBV contends that competitive advantage arises from "valuable, rare and hard-to-imitate resources that reside within an organisation" rather than traditionally assumed possessions such as natural resources, technology and economies of scale (Stiles and Kulvischaena, 2003, p. 4), since competitors would not be able to replicate such advantages. Human capital may be defined[3] as consisting of "the individual's capabilities, knowledge, skills and experience of the company's employees and managers, as they are relevant to the task at hand, and experience through individual learning" (Dess and Pickens, 1999), fulfils the conditions of being valuable, rare and difficult to imitate. These points are discussed in detail below:

- *Valuable*. The idea that human capital is very valuable to organisations is evident from very early writings on this subject (Smith, 1776; Paton, 1922; Scott, 1925; Flamholtz, 1999). Smith considered human capital to be an important contributor to revenue creation. Paton (1922, p. 486) mentioned that "[...] personnel may be a more important 'asset' than a stock of merchandise". Scott (1925) supported the idea that people were valuable enough to be accounted for in balance sheets. Flamholtz (1999) argued that investments in human capital are as valuable to the firms as investments in physical assets and these should be reflected in the firm's financial reports. In fact, organisations often consider human capital to be their greatest asset (DTI, 2003b). Human capital is seen to be "latent with productive possibilities" (Boxall, 1996, p. 67), Stiles and Kulvisaechana (2003) suggest that these latent possibilities, or exceptional talent, are brought to fruition through interaction with the idiosyncratic procedures and processes specific to the employer firms. Thus, human capital, in the form of such talent, is a valuable resource for the firm. Further indications that human resource is valuable to organisations is found in Hamel and Prahalad (1994, p. 232), who mention that economic rents may be attributable to "people-embodied skills", suggesting that skilled employees are valuable for obtaining higher than average returns in firms.

- *Rare*. When some firms are able to acquire employees who are more talented than their peers, and the numbers of such talented employees in the labour market are insufficient for them to be available to all of the firms, these talented employees serve as a rare resource that is able to provide a competitive advantage. Snell *et al.* (1996, p. 65) posit that such employees will be "a form of human capital (that) can be a source of sustained competitive advantage", since their rarity will make such resources unavailable to competitors.
- *Inimitable and non-substitutable*. A firm that has a competitive advantage due to its relatively more talented workforce may lose that advantage when competitors are able to imitate this resource or substitute it with an equivalent factor. However, such imitation could be difficult because of causal ambiguity and path dependency (Barney, 1991; Becker and Gerhart, 1996). Causal ambiguity relates to the extent to which a firm's human resource policies may serve to improve and sustain the performance of employees. The causal ambiguity perspective indicates that when such policies only polish the employee's latent talents to a fine shine, rather than pick just anybody and make that person a super productive employee, then the employees with the latent talents are a resource that is difficult to imitate. The path dependency perspective indicates that even the effective human resource policies are not easily imitated, because they are developed over long periods and cannot be just purchased in the open market by competitors. Thus, the causal ambiguity and path dependency perspectives make it very difficult for competitors to replicate or substitute the advantages provided by a firm's talented human capital.

A well trained human resource meets all the RBV's criteria and hence is considered as a key strategic resource within the context of the RBV (Wright and McMahan, 1992; Wright *et al.*, 1994). Furthermore, the RBV focus has shifted strategy to a consideration of internal factors as sources of competitive advantage, from a focus on external sources, such as the industry position (Hoskisson *et al.*, 1999). Wright *et al.* (2001, p. 701) mention that within "the strategic literature, the RBV has helped to put people (or a firm's human resource) on the radar screen". Indeed, following Barney (1991), RBV has emerged as the most frequently used theoretical base for studies in strategic human resources, in theoretical and empirical research (McMahan *et al.*, 1999). Within the context of strategic human resources, an argument has been made for inimitable human resources, that is, highly skilled and motivated employees (Wright *et al.*, 1994) as well as inimitable human resource processes (Lado and Wilson, 1994) as sources of competitive advantage. Boxall (1996) integrated these perspectives by positing that organisations need to establish a skilled and highly motivated workforce, which gives them a human capital advantage.

Despite the extensive use of the RBV in strategic human resource literature, there has been only limited use of this theoretical base in accounting for human capital. Wright *et al.* (2001, p. 704), in considering human capital as a resource that provides sustained competitive advantage, within the context of the RBV, mention that the firm's stock of human capital "can and does change with time and must be constantly monitored [. . .]". An essential part of such a monitoring mechanism is a credible reporting system, and covers questions of what needs to be reported (i.e. what items may reflect this valuable, inimitable resource). Indeed, Abeysekera and Guthrie's (2004) third research stream provides an idea of pertinent human capital items that could be reported, although the RBV is very seldom mentioned as a theoretical basis for these studies.

RBV and firm strategy. Abhayawansa and Abeysekera (2008), is a rare paper in that it explores human capital reporting from the RBV perspective. The authors argue that human capital disclosures that are linked with the strategic directions of the firm, that is, disclosures that provide indications of how a firm's existing human capital serves as a key strategic strength, will be more useful to users of corporate reports. Because such disclosures enable users to see the strategic importance of the human capital of the organisation, there will be greater demand from users for reports of this nature, which will in turn compel a greater amount of human capital-based reporting. The implication of this argument is that users currently do not find human capital related disclosures to be useful because they cannot see the strategic importance of these disclosures, which in turn leads to low demand for such disclosures and, hence, low supply.

RBV and concerns about competitors. The RBV could also explain the low levels of human capital-based disclosures from another perspective. A key implication of the RBV is that competitors should not be able to imitate a firm's rare resource, at least in the short term. One way of preventing such imitation or at least delaying any imitation as long as possible is by providing few, if any, clues to competitors regarding the firm's valuable resources, particularly human resources (such as, for example, workforce diversity that may be positively linked to productivity, as indicated by Richard (2001)). If such secrets are revealed, competitors may quickly copy these practices, eroding the disclosing firm's competitive advantage. As such, firms may undertake relatively lower frequency of human capital disclosures (Table I) because they do not want to reveal information that may give away their competitive advantage to competitors.

Several empirical studies offer support for the possibility that firms are reluctant to report human capital-based information externally because competitors may use this information and erode their competitive advantage. The UK DTI (2003b, p. 5) indicates that human capital-based data are "rarely reported externally" possibly because of "concerns over commercial confidentiality". Verma and Dewe (2008) indicate that "sensitivities" regarding what should be reported serves as a barrier to human capital reporting in practice. Foong *et al.* (2003, p. 31), in discussing why firms are reluctant to provide human capital-based disclosures in external reports, posit that such disclosures "may give important information to competitors [. . .]" and some of this information is about "sources of competitive advantage", therefore, it is "not appropriate for external reporting".

Nevertheless, these conclusions have not been analysed within the context of the RBV, nor has any study been published to date that specifically tests for the RBV-based explanation that the fear of revealing company secrets to competitors serves as a barrier to greater human capital-based disclosures and reporting.

The distinction between these two RBV-based perspectives, in explaining the low frequencies of human capital-based reporting, is important for policymakers and accounting standard setters, because they suggest very different solutions for promoting human capital reporting. If the low levels of human capital-based disclosures is due to an inadequate indication of the link between the existence of a particular resource and the strategic strength that it provides for the organization's growth and prosperity, the solution is to work on such links. The corresponding reporting regimes that would support this perspective could be detailed lists of the valuable human capital components and some narrative and graphical explanations on how such components are able to support and sustain exceptional performance. In short, this would entail adding narrative or graphical and text-based material to the human capital information reported in research stream three, and linking the reported material with the firm's strategy.

However, if the reason for non-disclosure is a fear of revealing too much information to competitors, then the solution for overcoming this barrier would be to use some aggregated reporting frameworks. Such aggregated reporting would indicate the presence of valuable human capital in the firm, but it would hide the key details that enable competitors to quickly mimic the human resource advantages of the reporting firm. Aggregated reporting strategies may include indices, ratings or summary narratives that provide sufficient information so knowledgeable users can make informed decisions, while competitors would not be able to find sufficient information to be able to mimic a firm's human resource advantages.

In summary, the RBV suggests two possible approaches to promote greater human capital-based disclosures. One approach suggests detailed disclosures with explanations of how these detailed resources provide a sustainable competitive advantage, based on the idea that at present users are not able to discern the link between the reported human capital and the corresponding strategic strengths. The alternative approach suggests that human capital-based information should be aggregated and perhaps provided in easily understood indices, ratings or overall summary narrations, so users can get an idea of the importance of such disclosures while competitors are not able to access vital information that may allow them to replicate such advantages. When the reasons for the low disclosures of human capital-based items are accurately discerned, the subsequent reporting approaches can be adapted to overcome the barriers to reporting, which will in turn compel widespread adoption of human capital reporting.

Critical accounting theory and concerns about labour

Critical accounting theory posits that accounting numbers that simply quantify events are used as a tool by the capital to subjugate labour (Deegan, 2006). In essence, human resource accounting may be viewed as an attempt to quantify humans. However, this accounting-based quantification of humans is a relatively recent development in a practice that has a lengthy history. Quantification of humans has occurred in many different ways, since the middle ages. The tendency to measure and quantify practically everything reached a peak in Europe in the seventeenth and eighteenth centuries (Martensson, 2009). The output of these quantitative measurements, termed political arithmetic, was meant to help the politically powerful to "develop a rational and effective society" (Martensson, 2009, p. 836). Although our current era has been termed an age of measurement (Porter, 2001), various attempts to measure intangibles, including human capital, in order to better manage firms, indeed harkens back to seventeenth and eighteenth century Europe's preoccupation with quantification.

Quantification is defined as the use of numbers to comprehend objects and events (Porter, 2001). Numbers provide a veneer of precision and exactness (Martensson, 2009). Thus, accounting numbers provide an air of legitimacy to decisions based on them (Power, 1996), even though many assumptions may underlie such numbers (Martensson, 2009). According to Johannisson (1988, as translated and cited in Martensson, 2009, p. 839), the political arithmetic era considered humans as:

> [D]umb pieces in the game of society [. . .] (where) [. . .] efficiency and rationality were the only rules. Their needs were reduced to the basic necessities of living and their object in life reduced to increasing the nation's monetary power.

In the era described by Johannisson, human capital was exploited with little regard for ethics (Martensson, 2009) and quantification showed the benefits of certain actions, and served as a tool for justifying exploitation. For instance, ideas such as lower food rations, shorter lunch breaks and getting young children to start work early in life were suggested as potent approaches for boosting national revenues.

In essence, numbers were used to justify the subjugation of the lower classes of the society. Contemporary accounting output, which is essentially a set of numbers derived from complex calculations based on various assumptions, may be employed by the managers of firms to justify the subjugation of labour. For instance, accounting output may be manipulated to indicate lower profits, justifying lower wages. Data that indicates that the workers constitute a principal success factor may be totally ignored to provide labour unions with little room in bargaining for better remuneration. This idea is embodied in the political economy perspective, where accounting reports are seen to serve the interests of the relatively more powerful groups who have control over the accounting output (such as managers and employers) at the expense of relatively powerless entities such as labour (Deegan, 2006). The political economy perspective does not view accounting information as neutral and unbiased. On the contrary, it regards accounting reports as "social, political and economic documents [that] serve as a tool for constructing, sustaining and legitimising economic and political arrangements" (Guthrie and Parker, 1990, p. 166). Critical accounting theory extends this idea, which is rooted in the political economy and Marxist perspectives, to the arena of class struggles. In these class struggles, accounting numbers offer a veneer of "precision". Thus, arguments based on accounting data bear an air of legitimacy. In essence, accounting output serves as a tool that legitimises information that enables powerful groups, namely capitalists, to maintain and further their own interests, at the expense of the less powerful classes, such as labour.

Critical accounting theory takes the viewpoint that accounting reports are a construct designed to offer a perception, rather than an actual representation, of objectivity or neutrality (Deegan, 2006). According to this theory, accounting output is a product resulting from the power mongering amongst various groups. Hopper *et al.* (1995, p. 528) contend that "accounting is a social practice within political struggles" while Hines

(1988) posits that accountants construct reality in reporting it. Baker and Bettner (1997, p. 305) mention that:

> [...] critical researchers have convincingly and repeatedly argued that accounting does not produce an objective representation of economic reality, but rather provides a highly contested and partisan representation of the economic and social world.

The partisan nature of the process favours capital, at the expense of labour (Sikka and Willmott, 2005). In the past, professional accounting bodies have opposed reforms that could have increased the accountability of corporations (Puxty *et al.*, 1994). Critical accounting researchers have mentioned that the technology of accounting has been used to exploit labour (Sikka *et al.*, 1999) and citizens (Cousins *et al.*, 2000). In short, the claims of ethics and integrity by various accounting bodies are seen to be mere self proclamations with little substance, and these proclamations are not evident in their various policies and actions. Roslender and Stevenson (2009, p. 866) observe that:

> Accounting is designed to ensure that the social arrangements consequent upon (the existing capitalists') belief system remain in place and, over time, are successfully reproduced. Any disjunction between accounting practice and the prevailing belief system, therefore, potentially poses a problem to the continued existence of these social arrangements. Within capitalist society, the interests of capital have consistently been privileged over that of labour.

Deegan (2006) provides some evidence that supports these observations in an Australian context. He considers a case pertaining to corporate social reporting (CSR), where the Parliament of Australia Joint Committee on Corporations and Financial Services requested feedback on whether CSR should be regulated. The three major Australian professional accounting bodies, namely: the Institute of Chartered Accountants in Australia, the National Institute of Accountants and CPA Australia all opposed mandatory CSR. However, CPA Australia (2005, p. 6) mentioned that its own research indicated strong interest from the public (88 per cent) and shareholders (86 per cent) in mandating CSR by companies, but it still opposed such mandatory regulations because such requirements "would not enhance the value of the information provided and introduce and unnecessary layer of regulation". CPA Australia (2005, p. 9) also found relatively lower support for mandatory CSR provisions amongst business leaders (53 per cent), and concluded that this lower support reflected valid business concerns regarding the risk and negative consequences of "excessive and inflexible regulations". Thus, accounting bodies here seem to be interested in supporting the viewpoints and interests of businesses, rather than that of the public and shareholders. This gives credence to the critical perspective that accounting regulation, which posits that accounting output results from the interplay of various political groups (Deegan, 2006), rather than any preoccupation with providing objective information to legitimate stakeholders.

Roslender and Stevenson (2009) document a further episode in the UK. In this case, too, a government-based initiative sought to catalyse greater corporate disclosures, and was eventually thwarted by the accountancy profession, which appears to be representing the special interests of capitalists. Early in 2003, the UK government provided details supporting a task force on human capital management that would identify measures used in practice to assess human capital investments, consider the best practices in human capital reporting and champion widespread human capital reporting (DTI, 2003a). This task force was established to address the under-reporting of human capital in the UK. This task force's report, published in November, 2003, recommended human capital-based reporting within an extended operating and financial review (OFR), which could make such reporting mandatory for companies in the UK (DTI, 2003b). The UK Government indicated strong support for the Task Force's eventual recommendations. A proposal for making such human capital-based reporting mandatory was passed into law in the UK on 22 March 2005. However, the Chancellor of the Exchequer surprisingly intervened on 28 November of the same year, and removed the mandatory provisions for human capital-based reporting in UK companies.

Roslender and Stevenson (2009, p. 861) observe that this repealing of the mandatory legislation for human capital reporting in the November of 2005 "genuinely shocked interested parties [. . .] and led to widespread criticism". Friends of the Earth, a charitable organisation, "threatened legal action". This sudden repealing of provisions that would mandate greater disclosures have been seen to placate the accounting profession, particularly auditors (Roslender and Stevenson, 2009). The accounting profession is seen as successfully pursuing its own agenda in this initiative, with the final version of the OFR being not very different from its predecessor. This returning of the requirements to the status quo allowed the profession to carry on business as usual, without the need to address new reporting and accountability structures that could potentially alter the playing field for capitalists. In Roslender and Stevenson's (2009, p. 866) view:

> Any development that threatens to promote the interests of labour (people) within the prevailing social arrangements poses a problem to capital (senior management) [. . .] the UK accountancy profession seemed to have satisfied itself that the OFR model on offer was sufficiently close to its established modus operandi [. . .] Evidence that the profession was secure in its own control of the situation was subsequently furnished in the May 2005 ASB reporting standard", where human capital based information becomes a "relatively minor consideration.

These Australian and UK-based incidents exhibits interesting parallels. In the Australian case, the general public was in favour of greater disclosures by companies (88 per cent in the CPA Australia study) while in the UK, the friends of the Earth threatened legal action in response to the removal of proposed mandatory provisions for greater disclosures. In both cases, the accounting profession successfully opposed greater disclosures, going against the grain of public opinion. In fact, the DTI (2003a, p. 5) considers that human capital-based information is "rarely reported externally" possibly because of "the potential impact of disclosure on employees and employee organisations". This information relates to the critical accounting theory because it implies that labour-based organisations could potentially use externally published human capital-based information to their advantage, at the expense of the owners of capital.

Furthermore, these comments support Roslender and Stevenson's (2009) opinion that accounting reports are controlled by sectional interests. Such control limits the possibility of progress in full disclosure of human capital development, because such activities may turn out to serve the interests of labour over those of capital. However, no studies have been conducted that specifically test whether the critical accounting theory explains the reasons for the lack of widespread reporting of human capital-based information, particularly in corporate annual reports. If such studies could affirm that the critical accounting theory explains the relatively low levels of disclosures of human capital-based information (Table I), then subsequent accounting research in human capital reporting could be directed to resolving this labour-capital conflict. For example, metrics that provide information regarding a firm's strengths, particularly its superior human capital base, could be established through aggregated data and indices so they provide relevant information to investors while being of little use in wage bargaining. Data related to wage bargaining could be dealt with separately, in consultation with the labour unions, in such a manner that is supported by fair and ethical labour practices.

In short, progress in human capital reporting may be achieved by specifically addressing the barrier imposed by wage-based issues that potentially constrain human capital-based disclosures. For instance, this could be achieved by exploring output that provides important information regarding the firm's human capital (including narrations, indices and ratings) in cooperation with labour unions, with the understanding that such arrangements will help to improve the firm's standing in the capital markets. The advantages and benefits of such standing could be shared by labour and capital. In contrast, the lack of such understanding will result in a reluctance to report pertinent human capital-based information, which could result in a disadvantage for the firm in question in its pursuit of capital market-based funds, which would impact the firm unfavourably. This unfavourable impact would not be in the best interests of both labour and capital.

In essence, research on the relevance of critical accounting theory to the low levels of human capital-based disclosures will help to suggest reporting methods that can potentially drive progress in human capital reporting.

Discussion

The theoretical bases identified above can be seen to combine as in Figure 2.

The theoretical bases discussed above consider different possible explanations for the relatively low frequencies of human capital-based disclosures in corporate annual reports. It is apparent that there are several possible reasons for the low levels of disclosures of human capital-based information in corporate annual reports (Table I). However, the framework in Figure 2 does not indicate whether, in reality, firms do not undertake greater human capital-based reporting specifically because of any one of the theories mentioned above, or if all of them operate together simultaneously to reduce the frequency of human capital disclosures to capital markets.

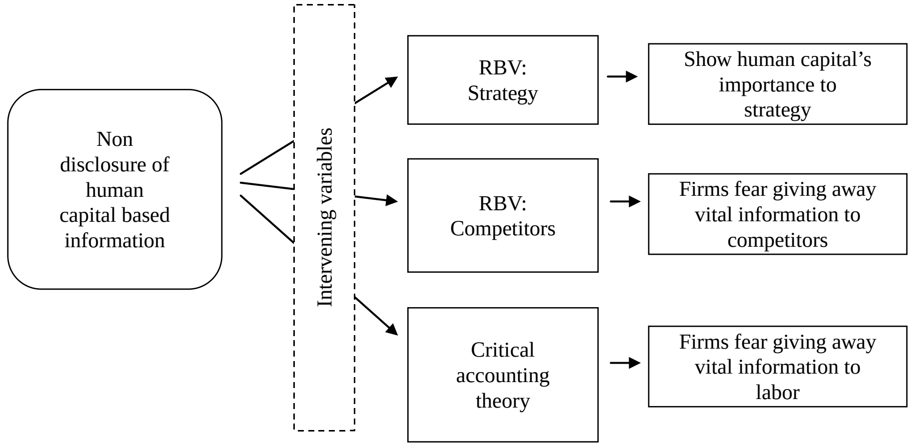


Figure 2.
Theoretical bases for the non-disclosure of human capital-based information

This limitation can be overcome by empirical studies that extend this research, and test the framework. Such studies, especially from different countries, will be able to shed more light on the particular forces that hinder the reporting of human capital-based information in different circumstances, industries and environments. Such studies should include open-ended questionnaires and surveys, which could unearth additional reasons for the low frequency of human capital-based disclosures. It is anticipated that different regulatory, cultural and general environments would influence the extent to which the different theoretical bases explain the reasons for non-disclosure of human capital. For instance, in countries where the regulatory regime strongly supports human rights and labour unions, there might be lower human capital-based disclosures in annual reports, as opposed to nations and industries which have weak human rights records. Based on critical accounting theory, in the former, this information could be used by labour for successful wage bargaining. In the latter, the social structures give the labour unions little or no power, so the human capital-based disclosures are not helpful in wage negotiations. As such, in the latter situation, the critical accounting theory would predict relatively higher frequencies of human capital-based disclosures, all other things being equal.

To consider another example, firms in very competitive industries and business environments may choose to disclose very little human capital-based information, because competitors may use such information at the expense of the firm that discloses such information. In contrast, based on the RBV, firms that face relatively lower competitive pressures, such as in monopolies, may choose to disclose relatively more human capital-based information, since there is little fear of competitors mimicking their success factors.

In essence, empirical studies would be able to shed light on various intervening variables (such as the strength of the legal system, degree of protection given to human rights, levels of competition faced by a firm) that, working in tandem with the theoretical bases shown in Figure 2, are able to explain the low level of human capital-based disclosures in annual reports.

Conclusion

This paper briefly explores a number of theoretical perspectives that may help explain the relatively low frequency of human capital-based disclosures in corporate annual reports, which are taken as a medium for releasing corporate information to capital markets. It suggests a framework that considers several theoretical viewpoints that may be able to explain why firms are reluctant to disclose more information on human capital in their external reports. It points the way for future research, namely: empirical studies that could test these theories and perhaps unearth other factors that may help researchers to comprehensively understand the forces that hinder the provision of human capital-based disclosures to capital markets.

This understanding can in due course assist policy makers and accounting regulatory bodies to fashion international accounting standards that take into account, and address, the forces that currently hinder human capital-based disclosures. Such standards will promote human capital-based disclosures amongst corporations and help in the promulgation of efficient international accounting standards. This will in turn lead to efficient resource allocation in the economy and promote robust economic growth.

Notes

1. Meritum (2002) defines human capital as the knowledge that employees take with them when they leave the firm, structural capital as the pool of knowledge that stays with the firm at the end of the working day, and relational capital as all resources linked to the external relationships of the firm, including customers, suppliers and R&D partners. All of these classifications are essentially variants of the three basic categories of intellectual capital, namely, human, internal and external capital (Table I).
2. This discussion assumes that the non-operation of the efficient market hypothesis (EMH), especially in its strong form. In essence, the EMH assumes that all information is available to the capital market from many sources in addition to annual reports, and as such any information not provided in the annual reports will be available to the investors from other sources (Fama *et al.*, 1969; Lee, 2001; Deegan, 2006). As such, the strong form of the EMH implies that human capital-based information need not be reported by the firm because the markets will already have this information from other sources. Brown (1994, p. 14) posits that "few, if any, investors would seriously accept the strong form" of the EMH. Hendrikson and van Breda (1992), commenting on the EMH, posit that, in hindsight, the market has not always proven to be efficient – a statement applicable to Enron, Parmalat and the US subprime mortgage crisis today, well over a decade after Hendrikson and van Breda (1992).
3. This definition is principally consistent with the earlier definitions in that human capital is an aggregate of the employees' skills and abilities. Essentially, it aligns these skills and abilities more closely with the RBV outlook.

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