2007

Intellectual capital reporting between a developing and developed nation

Indra Abeysekera
University of Sydney, indraa@uow.edu.au

Publication Details

This article was originally published as Abeysekera, I, Intellectual capital reporting between a developing and developed nation, Journal of Intellectual Capital, 8(2), 2007, 329-345.

Intellectual capital reporting between a developing and developed nation

Abstract

Purpose - This paper examines the patterns of intellectual capital reporting (ICR) of large listed firms in a developing nation, Sri Lanka. The aim of this study is to highlight the differences in ICR practice between developing and developed nations.

Design/methodology/approach - The paper begins by examining each of the top 30 firms by market capitalization listed on the Colombo stock exchange in 1998/1999 and 1999/2000. Using the content analysis method, it reviews the annual reports of these firms to determine the types of intellectual capital (IC) items reported in Sri Lanka. It then compares these findings with a similar study undertaken in Australia during the same period (Guthrie and Petty, 2000).

Findings - ICR differences were identified between Sri Lankan and Australian firms, and it is argued that that these differences can be attributed to economic, social and political factors. The paper highlights the need for a uniform ICR definition and a reporting framework that provides comparative and consistent reporting under the auspices of a regulatory body.

Practical implications - This study highlights important policy issues for Australia, Sri Lanka and other nations. These issues are even more pertinent in the light of the gradual international adoption of the International Financial Reporting Standards (IFRS), formulated by the International Accounting Standards Board (IASB).

Originality/value – Most papers on intellectual capital reporting have focused on firms in developed countries. This study offers insights into comparative reporting practices between a developed and a developing country.

Keywords

intellectual capital, intellectual capital reporting, Sri Lanka, developing nations

Disciplines

Accounting | Business | Social and Behavioral Sciences

Publication Details

This article was originally published as Abeysekera, I, Intellectual capital reporting between a developing and developed nation, Journal of Intellectual Capital, 8(2), 2007, 329-345.

Intellectual capital reporting between a developing and developed nation

by

Indra Abeysekera

Discipline of Accounting

The University of Sydney, Australia

Name and address of the institution from which the work originates:

Correspondence details

Dr Indra Abeysekera

Discipline of Accounting

Economics & Business Building (H69)

The University of Sydney NSW 2006

Australia

Phone: +61 417 405 399

Email address: indraa@econ.usyd.edu.au

Intellectual capital reporting between a developing and developed nation

Abstract

Purpose - This paper examines the patterns of intellectual capital reporting (ICR) of large listed firms in a developing nation, Sri Lanka. The aim of this study is to highlight the differences in ICR practice between developing and developed nations.

Design/methodology/approach - The paper begins by examining each of the top 30 firms by market capitalization listed on the Colombo stock exchange in 1998/1999 and 1999/2000. Using the content analysis method, it reviews the annual reports of these firms to determine the types of intellectual capital (IC) items reported in Sri Lanka. It then compares these findings with a similar study undertaken in Australia during the same period (Guthrie and Petty, 2000).

Findings - ICR differences were identified between Sri Lankan and Australian firms, and it is argued that that these differences can be attributed to economic, social and political factors. The paper highlights the need for a uniform ICR definition and a reporting framework that provides comparative and consistent reporting under the auspices of a regulatory body.

Practical implications - This study highlights important policy issues for Australia, Sri Lanka and other nations. These issues are even more pertinent in the light of the gradual international adoption of the International Financial Reporting Standards (IFRS), formulated by the International Accounting Standards Board (IASB).

Originality/value – Most papers on intellectual capital reporting have focused on firms in developed countries. This study offers insights into comparative reporting practices between a developed and a developing country.

Keywords intellectual capital, intellectual capital reporting, Sri Lanka, developing nations.

Paper type Research paper

Overview

Recent changes in the global economy have led to an increasing focus on intellectual capital (IC). Factors such as globalisation, new technology, relatively free capital, increased competition, changes in customer demands, the demand for innovation and changes in economic and political structures, and the growing role of the state in supporting knowledge economies, are constantly reshaping the way business is carried out, and highlighting the importance of IC and IC reporting (ICR) for firms (Buckley and Carter, 2000; Garcia-Ayuso, 2003; Thorne and Smith, 2000; Volberda, Baden-Fuller and van den Bosch, 2001).

Several authors have taken a long-term view in defining and nature of IC, though their definitions have varied significantly (Edvinsson and Sullivan, 1996; Brooking, 1997; Edvinsson, 1997; Edvinsson and Malone, 1998; Stewart, 1997, p. x; Klein, 1998, p. 1; Nasseri, 1998; Saint-Onge, 1998; Ulrich, 1998; CMA, 1998, p. 3; ASCPA and CMA, 1999, p. 4; Knight, 1999). For the purposes of this study, IC is defined as knowledge that can be converted into value (Edvinsson and Sullivan, 1996, p. 358). The IC held by a firm can be thought of as a form of 'unaccounted capital', to borrow a term used in the traditional accounting system. This 'unaccounted capital' can be described as the knowledge-based equity that supports the knowledge-based assets of a firm. IC includes both intellectual assets (IFAC, 1998, p. 12) and intellectual liabilities (Caddy, 2000, pp. 141-142).

There is however little discussion in the literature in relation to a definition of the reporting of IC. Therefore this paper refers to the definition proposed by Abeysekera and Guthrie (2002) of ICR as "external reporting intended to meet the information needs common to users who are unable to command the preparation of reports about IC tailored so as to satisfy, specifically, all of their information needs".

While several ICR studies have been carried out in developed nations, there is a dearth of research on the ICR practices of firms located in developing nations and, in particular, of comparative studies with firms in developing nations. This study seeks to fill this gap – a gap that has become increasingly significant as developing countries find themselves competing with firms in developed countries due to globalisation, lower transaction costs, and more freely available capital. As Daley (2001, p. 5) points out, in today's knowledge economy the competitive advantage of firms lies in IC attached to products and services, rather than in the actual products or services themselves. In addition, globalisation and the resulting relatively free flow of capital between countries have increased investor interest in investing in developing economies such as Sri Lanka, in order to maximise their accumulation of capital. As a result, the Colombo Stock Exchange (CSE) is heavily dependent on foreign investment, making firms listed on the CSE increasingly vulnerable to flows of international capital migration (CSE, 1998, p. 33; 1999, p. 50; 2000, pp. 34, 67).

Sri Lanka has been chosen as the location for the study of ICR in a developing nation for five reasons. First, Sri Lanka is a lower middle-income country that typifies a developing nation (UNDP Sri Lanka 1998, pp. 5, 42). Second, as a way of directing the country's economy toward a knowledge-based economy, the Sri Lankan government offers reduced corporate taxation rates and exemptions from direct and indirect taxation to both foreign and local investors (BOI, 2000; 2003). Third, the Sri Lankan government heavily invests in maintaining a skilled labour force and a high literacy level, which makes it easier for investors to maximise their return on capital (The World Bank, 2004). Fourth, recent amendments to the

Intellectual Property Act 1979, which were implemented to further push Sri Lanka towards a knowledge-based economy, have strengthened the mechanisms for the creation and enforcement of property rights, which is a crucial factor in attracting foreign investors (*Code of Intellectual Property Act No.40 2000;* USAID, 1998, pp. 7-8; Wickremaratne, 2000). Fifth, the decided reluctance of accounting regulators and company lawmakers to implement regulations has given firms no choice but to make voluntary disclosure (The Sunday Times, 1999a; 1999b).

This study attempts to report findings in relation to ICR practices in a developing nation, Sri Lanka, and then compare them with a previous study of a developed nation, Australia. The study has used an established framework on ICR to determine the variables of IC that cause such differences. It then argues for a policy framework for consistent and comparable ICR that would allow for more meaningful decision-making on resource allocation by users. This is important, given the fact that accounting regulators such as International Accounting Standards Board (IASB) have long ignored the importance of such a framework in recognising IC in financial statements.

To achieve the abovementioned aim, section 2 of this paper reviews the current literature on ICR and the existing ICR frameworks. Section 3 outlines the research method used in this study, namely, the content analysis method, and argues for the appropriateness of its application to annual reports. Section 4 reports on the results of our investigation by outlining the differences in ICR between the two countries. The paper then concludes by outlining the limitations of this study and suggesting areas for future research. Last section offers concluding remarks in relation to developing a policy framework for a consistent ICR regime that can be evaluated comparatively with that of other countries.

Literature Review

Until recently few firms had attempted to measure and assess IC (Guthrie and Petty, 2000; Litschka, Markom and Schunder, 2006). This situation has experienced a rapid turnaround and there are currently several frameworks on offer for measuring and reporting IC. An early attempt at providing such a model was made by Brooking, who classified IC items into four major IC categories (Brooking, 1996, pp. 12-81, 129; Brooking 1997). These categories were: assets which give the firm power in the market place, such as trademarks, customer loyalty, repeat business and so on; assets representing property of the mind such as intellectual property (patents, trademarks, copyright so on); assets which give the firm internal strength, such as corporate culture, management and business processes, strength derived from IT systems and so on; and, assets derived from the employees of the firm, such as knowledge, competencies, work related know-how, networking capability and so on.

Measuring and assessing IC by firms have become more important with the adoption of International Financial Reporting Standards (IFRS) by many countries including Australia and Sri Lanka. IFRS takes a prudent approach in recognising assets and the treatment of assets revaluation (Dixon 2003; Vergauwen and van Alem, 2005). The prudent approach adopted by IASB in setting IFRS (such as applying impairment test on assets and writing off intangibles which cannot be objectively verified in reference to an active market) alters the reporting value rather than fair value of the firm.

Further, the prudent approach adopted by IFRS has increased the ‘unexplained’ gap between the fair price and the reported value (net book value) of the firm. Since investors are not fully aware of the gap between the fair value and reported value of the firm (Lev, Sarath and Sougianis, 1999), this information gap creates two broad classes of investors: those that have access to information relating to the 'unexplained gap' (perhaps shared at private meetings) and those that don't (Marr, Mouritsen and Bukh, 2003). The investors who have access to information that explicates the 'unexplained gap' can make better economic decisions as compared to those without the information.

Five major IC frameworks have been identified in the literature. These are: (i) structures holding intellectual assets (Sveiby, 1997a, pp. 93, 11-12, 165), which focuses on intellectual assets; (ii) assets representing IC (Brooking, 1996, pp. 13-15, 129; 1999, pp. 153-155), which focuses on intellectual assets; (iii) strategic root and measurement root (Roos, Roos, Dragonetti, and Edvinsson, 1997, p. 15), which focuses on reporting IC from a strategic perspective; (iv) a combination of assets and capital representing IC (SMAC, 1998, p. 14; IFAC 1998, p. 7; Dzinkowski, 2000), which is an extension of the assets representing IC model; and (v) capital holding IC items (Edvinsson, 1997; Edvinsson and Malone, 1998; Roos et al., 1997; Edvinsson and Sullivan, 1996), which has been modified by others (Roos and Roos, 1997; Stewart, 1997, pp. 229-246) and which discusses IC in relation to capital categories. The IC framework represented by capital categories (internal, external, and human) adopted in this study has been successfully used in previous empirical research (Abeysekera and Guthrie, 2004; 2005).

Annual reports are an ideal research location for applying the IC framework because they provide a good proxy with which to measure the comparative positions and trends of IC between firms, industries and countries (Abeysekera, 2001). Also, annual reports are an instrument through which firms communicate their issues and messages in a comprehensive and compact manner. Further, they are produced on a regular basis and offer an opportunity for a comparative analysis of management attitudes and policies across reporting periods (Niemark, 1995, pp.100-101).

Much of the published research has used annual reports as source documents to ascertain the status of the IC of firms, both within countries (Abeysekera and Guthrie 2005; Brennan, 2001; Bozzolan, Favotto, and Ricceri, 2003; Guthrie and Petty, 2000) and between countries (Vandemaele, Vergauwen and Smits, 2005).

Researchers in Australia (Guthrie and Petty, 2000) have undertaken an empirical examination of Australian organisational practice in reporting IC using content analysis by examining annual reports of the top 20 firms by market capitalisation. The authors first reviewed the existing literature on governmental and professional policy pronouncements to identify firms that are currently discussing IC. Second, they carried out a content analysis of the top Australian listed firms, and one other firm ostensibly active in reporting its IC, to understand to what extent these firms reported their IC. They analysed the IC content of annual reports by frequency count. The research used a ‘best practice’ firm as a benchmark to identify what firms were doing, and what they could be doing, in terms of reporting IC.

In undertaking their research, the authors used the IC framework developed by Sveiby (1997b) and categorised IC into internal structure (internal capital), external structure (external capital) and employee competence (human capital). Their study revealed that key components of IC are poorly understood, inadequately identified, inefficiently managed and inconsistently reported in Australian annual reports. On the whole, firms do not have a consistent framework for reporting IC. Even the

Australian 'best practice' firm is in need of a comprehensive management framework, especially for reporting IC information. Interestingly, where IC is in fact reported, entrepreneurial spirit is the most frequently reported attribute.

Other findings of the Australian study include the observation that reporting external capital was more in favour with large (by market capitalisation) firms. This can be understood in the light of the emphasis in recent years on rationalising distribution channels, reconfiguring value chains and re-assessing customer value through exercises such as customer profitability analysis. Guthrie and Petty (2000) identified that most of the IC information reported was on external capital (40%). Reporting of human capital (30%) and internal capital (30%) were evenly distributed.

Guthrie and Petty (2000) concluded from their research that Australian firms appear to have taken a conceptual rather than a practical approach to reporting IC. The often-stated claim made in annual reports that human capital represents the most important assets of the firm is not supported by the IC items reported and measured in the remaining sections of the annual report. In other words, there is a gap between the stated recognition of the importance of IC (the rhetoric) and actual steps taken to place ICR on the agenda of Australian firms and public policy (the reality). Consequently Australian firms do not compare favourably with several European counterparts in terms of their ability to manage, develop, support, measure and report IC.

The Australian study by Guthrie and Petty (2000) provides a helpful point of comparison for this study of ICR in Sri Lanka, for four reasons. First, this study has adopted an IC framework that is consistent with that used by the Australian study.

Second, Australia represents a typical developed nation while Sri Lanka represents a typical developing nation. Third, both studies have undertaken a comprehensive ICR analysis using annual reports as their source document and content analysis as their methodology. Fourth, both studies reviewed annual reports during the same period: . the Australian study reviewed annual reports of 1999 and the Sri Lankan study reviewed annual reports between 1998 and 2000, with controlled variations to compensate for the time difference.

Research methods

The sample used for this study consists of the top 30 listed firms in the Colombo Stock Exchange (CSE), selected according to market capitalisation, for two consecutive years ending 31 December 1998 or 31 March 1999, and 31 December 1999 or 31 March 2000. Taking into account the experience of previous IC research, this study has attempted to control the size effect to some extent by selecting the sample of firms by market capitalisation (Guthrie and Petty, 2000).

This study uses the annual reports of firms as its source of information. Empirical evidence suggests that annual reports provide an opportunity for firms to expand their communication with investors by going beyond the reporting of purely financial information (Cameron and Guthrie, 1993), and to show leadership and vision by reflecting the values and position of the firm (Niemark, 1995, pp. 100-101; Clackworthy, 2000).

In analysing annual reports, the content analysis method is used. Content analysis is defined as a technique for gathering data that consists of codifying qualitative information, in anecdotal and literary form, into categories in order to derive quantitative scales of varying levels of complexity (Abbott and Monsen, 1979, p. 504).

The content analysis was undertaken as follows. Qualitative data was recorded in the coding sheet, using an IC framework that incorporates the internal capital, external capital and human capital sub-categories of IC. The coding sheet recorded the frequency analysis for the 45 IC items adopted from IC models and from previous research (Zubbarao and Zeghal, 1997; Guthrie and Petty, 2000). This paper defines an IC item as an IC attribute. The existence of one or more attributes gives rise to an IC sub-category. The categorisation of IC items into 45 categories enabled this study to identify IC attributes at their basic level. These IC items comprise 25 items of human capital, 10 items of external capital, and 10 items of internal capital. The study focused on human capital items because Sri Lanka has a high literacy rate (91.8%) for a developing country (Central Bank of Sri Lanka Socio-Economic Data 2001, pp. 1, 63; Human Development Report 2000, pp. 157-160; McSheehy, 2001, p. 57; UNDP Sri Lanka, 1998).

The IC items in the human capital category were clustered into seven sub-categories: (i) training & development; (ii) entrepreneurial skills; (iii) equity issues; (iv) employee safety; (v) employee relations; (vi) employee welfare; and, (vii) employee-related measurements. The training and development sub-category comprises know-how, vocational qualifications, career development and training programs. The equity issues sub-category comprises equity issues relating to race, gender, religion and disability. The employee relation sub-category comprises union activity, employees being thanked, employees being featured and employee involvement in the community. The employee welfare sub-category comprises employee and executive compensation plans, employee benefits, and employee share and option ownership plans. The employee-related measurements sub-category comprises value-added by employees and executives, employee numbers, professional experience, education levels, expert seniority and age of employees (Subbarao and Zeghal, 1997).

The internal category was clustered into five IC sub-categories: (i) processes; (ii) systems; (iii) philosophy and culture; (iv) intellectual property; and, (v) financial relations. The processes sub-category includes both management and technological processes. The systems sub-category includes both information systems and networking systems. The philosophy and culture sub-category includes philosophy and culture. The intellectual property sub-category includes patents, copyrights and trademarks. The financial relations sub-category includes favourable and/or unfavourable financial relations with other institutions.

The external category is clustered into five IC sub-categories: (i) brand building; (ii) corporate image building; (iii) business partnering; (iv) distribution channels; and, (v) market share. The brand-building sub-category includes brands, customer satisfaction, and quality standards, IC items. The corporate image-building sub-category includes company name and favourable contracts. The business-partnering sub-category includes business collaboration, licensing agreements and franchising agreements. The distribution channel sub-category refers to distribution channels held by the firm. The market share sub-category refers to the market share held by the firm.

The IC information collected from the analysis of annual reports was coded separately for two consecutive years. Each IC item was recorded by frequency of occurrence, under each IC category. The units of information were double-checked to ascertain the correct quantification of coded content in annual reports.

Results and discussion

Our study of Sri Lankan firms examined ICR in greater detail than that of the Australian study undertaken by Guthrie and Petty (2000). Nevertheless, the discussion of results in this paper is confined to those ICR categories, sub-categories and items that are common to both studies and that point to a sizeable difference between the two countries. These differences are outlined in Table I.

<Take in Table I>

Table I

Comparable differences of ICR sub-categories by frequency of reporting

Frequency	Australia	Sri Lanka
External capital		
Highest	Business partnering	Brand building
Least	Brand building	Distribution channels
Human capital		
Highest	Entrepreneurial skills	Employee relations
Internal capital		
Highest	Philosophy and culture	Management processes
Fourth highest	Intellectual property	Philosophy and culture
Fifth highest	Networking systems	Intellectual property

The rest of this section of the paper provides an overall comparison of ICR practices, ICR categories and ICR sub-categories and items between Sri Lanka and Australia.

However, at the outset, four methodological differences must be considered when comparing the Australian and Sri Lankan studies. First, the framework used in the Australian study had fewer attributes in human capital than the framework used in the Sri Lankan study. Second, the present study covers two consecutive years of sampling of the top 30 firms by market capitalisation, whereas the study in Australia sampled the top 20 firms by market capitalisation over one year. Third, the sample size in Sri Lanka was more representative of firms listed in the CSE since Sri Lanka has a smaller market (64.2% in 1998; 59.93% in 1999). In contrast, the sample size in Australia may not be as representative of firms listed in the Australian Stock Exchange because of the larger size of the Australian market. Fourth, although size of firms were controlled by selecting firms by market capitalisation. However, the composition of firms by industry sector is not identical in Australian and Sri Lankan sample. These differences in composition of industry sectors may have influenced the reporting differences.

Although in the 1990s, investing in emerging markets was popular, the Mexican crisis in 1994-1995, the East Asian Crisis in 1997, and South Asian Crisis in 1998 coupled with the long bull-run from the mid to late 1990s in developed markets, discouraged portfolio investments in emerging markets (CSE, 2000). The perceived advantage of investing in new economy shares shifted investor attention to technology shares in the stock market worldwide. The CSE, however, did not list a single technology stock as it represented an 'old' world economy during the period of this study.

Overall findings

In line with the previous research carried out in Australia, the present study found that firms in Sri Lanka did not have a theoretical framework for ICR (Guthrie and Petty, 2000). While a small number of annual reports in Australia, namely those of Lend Lease and Morgan & Banks, had a separate section to describe IC (Guthrie and Petty, 2000), such descriptive analysis was completely non-existent in the annual reports of the Sri Lankan sample. It could be argued that having an exclusive section for IC in the annual report could attract the unwanted attention of regulatory bodies of both nations. Therefore, it is possible that firms are more inclined to present ICR in an *ad hoc* fashion in annual reports. As Cooper (1980, p. 164) explains, accounting is a means of sustaining and legitimising a firm's social, economic and political arrangements. Within this construct, accounting reports are viewed as a means of creating, sustaining and legitimising these arrangements in the interests of the firm (Guthrie and Parker, 1990).

The analysis of the annual reports of Sri Lankan firms suggests that, of the three IC categories, external capital is the most reported, and human capital is the second most reported IC category. Similar conclusions have been reached by researchers in Australia (Guthrie and Petty, 2000) and in Ireland (Brennan, 2001). however in Sri Lanka human capital was found to be relatively more reported as an IC category. Based on these findings, some researchers can conclude that, in Sri Lanka, human capital is not the most important IC category in practice, despite public pronouncements to the contrary made by some firms. However, such a conclusion can be challenged on two grounds. First, firms may have designed their annual reporting in such a way as to set and reflect their economic, political and social arrangements, without necessarily directly reporting IC elements. ICR frequency on annual reports alone does not necessarily offer a guide to the level of importance placed on human capital within the firm. Second, firms in Sri Lanka are more inclined to view employees as human capital rather than labour. Employees can be treated as assets when firms are dependent on people for their knowledge, however employees can be treated as labour when firms are dependent on technological systems that hold the codified knowledge of employees.

External capital

Both in Australia (40%) and Sri Lanka (44%), reporting external capital was more in favour with firms than any other category. The global competition for capital requires firms to uphold investor confidence by means of proactive ICR. Specifically in the case of Sri Lanka, there are three possible explanations for the relative importance of reporting external capital. First, an emphasis on external capital could counter the negative effects of socio-political factors, such as the civil war, on investor confidence in Sri Lanka. Second, such an emphasis could help counter the negative impact of protective labour legislation on capital reproduction (McSheehy, 2001).

Finally, the CSE is relatively small by market capitalisation, and therefore relies heavily on foreign investors to maintain its liquidity and to bridge the gap between investments and savings (CSE, 1998). The two indicators of market liquidity, namely, market capitalisation as a percentage of GDP and trade value as a percentage of market capitalisation, reveal that the CSE has the lowest liquidity level in the region (CSE, 1998, p. 10). While investing in emerging markets was popular in the early 1990s, the Mexican crisis of 1994-1995, the East Asian Crisis of 1997 and the South Asian Crisis of 1998, coupled with the long bull-run from the mid to late 1990s in developed markets, discouraged portfolio investments in emerging markets in the latter part of that decade (CSE, 2000). These factors may have contributed to Sri Lankan firms placing greater emphasis on reporting external capital. External capital reporting can have a significant impact on upholding investor confidence, particularly in the case of external capital sub-categories such as brand building, which, as discussed later in this section, has been a significant component of the ICR of Sri Lankan firms.

The annual reports of Australian firms included more frequent disclosure from the business-partnering sub-category of the external capital category compared to those of their Sri Lankan counterparts. As indicated by previous research, business partnering with developed countries obtains higher returns than with developing countries, thus ICR by Australian firms enables them to attract investor capital from other developed nations into their firms (Ueng, Kim and Lee, 2000).

On the other hand, Sri Lankan firms reported more on brand building compared to their Australian counterparts. One explanation for this might be that nearly a one third of firms in the Sri Lankan sample are largely owned by multinationals. These multinationals have access to a large array of resources within their global group of firms that are generally not available to other firms. Annual reports reveal that multinationals market these global branded products locally to maximise their reproduction of their capital. The previous literature also confirms that branded products are at the highest end of the profitability chain, thus enabling them to maximise their capital through growth in profits and in the market value of the firm (Daley, 2001). Therefore, the strength of this sample of firms, dominated by multinationals, lies in its access to branded products. It appears that these firms make a point of reporting their internationally acclaimed brands in order to attract investor capital into their firms.

Human capital

The proportion of ICR of human capital in Sri Lanka (36%) was higher than that of Australian firms (30%). This is no doubt a factor of Sri Lankan culture, where relationships between employees and the firm are far more important than in developed countries. Thus the Sri Lankan case contributes to a better understanding of the ‘entity’ view of the firm, which argues that the relationships between employees and the firm are the most important factor in retaining employees. In contrast, the ‘agency’ view of the firm, which is an organisational theory most widely accepted at present, assumes that there exists a certain, narrowly defined kind of relationship between investors and managers. This understanding is based on the implicit assumption that the firm is a bundle of assets delegated by owners to managers who are charged with the task of managing these assets (Blair, 1999, pp. 58-90). Within this framework, the term ‘agency’ refers to the delegation of decision-making rights, which are normally associated with the investors of the firm, to managers. These delegated rights include the right to control labour as a means of economising the overall running of the firm (Armstrong, 1991). However, as proponents of the entity view point out, modern management is increasingly interested in addressing the complex role of human input into the life of the firm, and is increasingly cognisant of the fact that human capital cannot be treated as something separate from corporate governance (Blair, 1999, pp. 58-90).

In line with the above, it appears that firms in Sri Lanka tend to rely on their employees’ tacit knowledge base from which to leverage the firm’s knowledge, rather than concentrate their energies on the direct codification of knowledge. This is accomplished by encouraging an emphasis on relationship building within the firm, and by indirectly promoting ‘communities of practice’ among employees. This practice is similar to that of many successful Japanese firms, as found by Nonaka (1991). In the Japanese study, it was found that knowledge creation was viewed as a process of tapping into the tacit knowledge, insights, intuitions and hunches of employees, on the basis that new knowledge finds its beginnings in the individual.

The government of Sri Lanka is also concerned about how firms utilise human capital. This is no doubt motivated by the government's heavy investment in the education sector (UNDP Sri Lanka, 1998, pp. 5-42). It is possible that firms in Sri Lanka are more proactive (as compared to Australia) in reporting human capital to avoid any unwelcome government regulation of the use of human capital (Abeysekera (forthcoming), 2007). The cultural differences between Australia and Sri Lanka also undoubtedly play a role in this phenomenon, however a discussion of cultural factors is beyond the scope of this study.

In relation to human capital, entrepreneurial skills were the most frequently reported attribute of human capital in Australia, whereas they were among the least reported attributes in Sri Lanka. This difference can be attributed to cultural, social, and economic factors. In particular, it could be due to firms in Sri Lanka borrowing research and development know-how from overseas firms, as a result of which Sri Lankan firms do not demand a high level of innovation from their employees.

Firms in Australia are far more involved in research and development compared to firms in Sri Lanka. This is because developed countries such as Australia provide a more supportive environment for technological innovation. The creation of such an environment is facilitated by flexible risk insurance, enabling the commercial application of such technological change. Also, investors in developed countries are willing to support such entrepreneurship because their markets have the ability to absorb the risk of innovation and the high initial market price. In other words, the cost of innovation in a developed nation is not a pressing issue. Consequently, in developed countries, products are able to undergo all the necessary stages of development, beginning with the initial phase, all the way through to the growth stage when such products become widespread in the national market.

Conversely, firms in Sri Lanka cannot multiply their capital through comparable entrepreneurship because it has a low price market that is typical of a developing nation. Thus, Isaak (1991, p. 169-171) points out that, on a global level, the product cycle almost always begins in high-income market economies such as Australia. When the product has reached standardisation of production, it becomes cheaper to produce in a low wage developing economy such as Sri Lanka, using the technologies recycled by developed countries such as Australia to maximise their capital accumulation (Isaak, 1991, p. 169-171).

This comparison between Australia and Sri Lanka points to a differences in values. It seems that Sri Lankan firms are more results driven in their assessment of human capital, emphasising the recognition of employee contribution to the firm and reporting on value added by employees. Australian firms, on the other hand, seem to be more process driven, emphasising the entrepreneurial qualities of employees and their work related knowledge. Inasmuch as it is possible to generalise from this brief comparative analysis between Sri Lanka and Australia, it can be argued that the differences between human capital reporting of firms located in developing and developed nations can be attributed to the differences in their political, social and economic institutional norms, institutions and frameworks. There is however a point of similarity between the behaviour of firms in the developing and developed worlds: firms in both types of economies voluntarily report human capital as a way of shaping the standards of human capital reporting in their country.

Internal capital

The proportion of ICR of internal capital by firms in Sri Lanka (20%) was less than in Australia (30%). The most reported IC items by Australian firms were management philosophy and culture. Brooking (1996, p. 62) defines management philosophy as “the way leaders in the firm think about the firm and its employees”. Management philosophy is often communicated through mission statements and has a substantial effect on organisational culture. Although Guthrie and Petty (2000) have not offered any reasons for the high reporting of management philosophy and culture in Australia, it could be due to the fact that Australian firms are far more established, competitive and therefore more focused on long term goals than their Sri Lankan counterparts. Interestingly, the present study found that recently privatised firms in the Sri Lankan sample had no mission statements but were in the process of developing them.

The internal capital item most reported by Sri Lankan firms was management processes. This can be explained in two ways. First, it appeared that Sri Lankan firms were embracing technological systems to replace routine administrative tasks, thus displacing semi-skilled and unskilled employees. Thus the focus of management processes could be a way of diverting the attention of the government that might otherwise try to impose stricter labour laws or mandate firms to take a greater responsibility in addressing unemployment. Second, of the focus on reporting management processes could be aimed at showing support for the government’s knowledge-based economy agenda, by implying that firms promote knowledge sharing and knowledge creating environments for its workers.

In the internal capital category, the incidence of ICR of intellectual property was higher among Australian firms than among Sri Lankan firms. It could be argued that this is due to the Australian government being more supportive than the Sri Lankan government of the entrepreneurial culture in its country, and the fact that more comprehensive laws are in place in Australia to protect intellectual property rights. Clearly, the development and enforcement of more robust intellectual property laws in developing nations such as Sri Lanka would increase the willing transfer of technology from developed nations (Bosworth and Yang, 2000; Romer, 1998, pp. 213; 218).

Concluding remarks

This study brings to the fore important policy issues for Australia, Sri Lanka and other nations. These issues are even more pertinent in the light of the gradual adoption of the International Financial Reporting Standards (IFRS), formulated by the International Accounting Standards Board (IASB), by countries around the world. Based on the deadline set on 28 June 2002 meeting of the Financial Reporting Council, the accounting standard setting body of Australia adopted IFRS on 1 January 2005. Under the Corporations Act, the IFRS is binding on all reporting entities in Australia (Howieson and Langfield-Smith, 2003; Miller, 2003). Sri Lanka, on the other hand, has been utilising IFRS for some time, with little or no modification to their original accounting standard setting framework (SLAS, 1997; 1999).

The problem with the IFRS is that, in many ways, it represents a step backwards in the measurement and reporting of IC. While there has been a shift in focus in the global and national economies from tangible to intangible assets (Simister, Roest and Sheldon, 1998, p. 2), the IFRS has in fact reduced the amount of intangibles recognised in financial statements (Vergauwen and van Allem, 2005). The IASB has provided a more convenient (and therefore less adequate) definition of intangibles that is limited to the reporting of 'reliable' information, to the exclusion of 'relevant' information that is often more difficult to measure and report. This has forced firms to resort to alternative measures to report their IC items that are not normally recognised in a firm's financial statements, in order to provide relevant decision-making information to the users.

The IAS 38 of the IASB proposes to define an intangible asset as an identifiable non-monetary asset without physical substance (Picker and Hicks, 2003). An asset meets the identifiability criterion when it is characterised by one or the other of the following two definitions: (i) it is separable, that is, it is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, asset or liability; (ii) it arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations (IAS 38; 2003; Picker and Hicks, 2003).

Thus the adoption of IFRS by many nations (including member states of the European Union) has created a greater need to focus on consistent and comparable ICR. The plethora of IC definitions and virtual absence of ICR definitions in the literature warrants an immediate response by regulatory bodies in enforcing the reporting of user relevant information in the financial reports of firms.

However, since the accounting regulators have shown a decided reluctance to intervene, it becomes necessary to rely on statutory institutions or stock exchanges to agree on an ICR definition and reporting framework. As demonstrated in the literature review section of this paper, Guthrie and Petty in Australia, Brennan in Ireland, Olsson in Sweden, and Subbarao and Zhegal in their study of several nations, have shown that the difference in fundamental assumptions and frameworks between countries can result in different outcomes that are not comparable between firms and nations.

Further, contextual factors such as globalisation, the decreasing trade barrier, and more freely available capital, have increased the competition faced by firms in most nations across the globe. The increasing reliance of firms on IC for competitive advantage has also amplified the need to examine comparative, comparable and timely ICR practices of firms for resource allocation decisions. An approach that accommodates and upholds those practices can substantially improve the credibility of financial reporting as a source of relevant information to users.

References

Abbott, W.F. and Monsen, R.J. (1979), "On the measurement of corporate social responsibility: self-reported disclosures as a method of measuring corporate social involvement", *Academy of Management Journal*, Vol. 22 No. 3, pp. 501-15.

Abeysekera, I. (2001), "A framework to audit intellectual capital", *Journal of Knowledge Management Practice*, Vol. 2, August. Available www.tlainc.com/jkmp.htm

Abeysekera, I. (2007), Motivations behind human capital disclosure in annual reports", *Critical Perspectives on Accounting* (forthcoming).

Abeysekera, I. and Guthrie, J. (2002), An updated review of literature on intellectual capital reporting, paper presented at 16th Australian & New Zealand Academy of Management (ANZAM) conference, Beachworth, December 4-7, 2002.

Abeysekera, I. and Guthrie, J. (2004), "How is intellectual capital being reported in a developing nation?", *Research in Accounting in Emerging Economies*, Supplement 2: Accounting and Accountability in emerging and transition economies, pp. 149-69.

Abeysekera, I. and Guthrie, J. (2005), "Annual reporting trends of intellectual capital in Sri Lanka", *Critical Perspectives on Accounting*, Vol. 16 No. 3, pp. 151-63.

Andrew, B.H., Gul, F.A., Guthrie, J.E. and Teoh, H.Y. (1989), "A note on corporate social disclosure practices in developing countries: the case of Malaysia and Singapore", *British Accounting Review*, Vol. 21, pp. 371-6.

Armstrong, P. (1991), "Contradiction and social dynamics in the capitalist agency relationship", *Accounting, Organizations and Society*, Vol. 16 No. 1, pp. 1-25.

ASCPA (Australian Society of CPAs) and CMA (The Society of Management Accountants of Canada) (1999), *Knowledge Management: Issues, Practice and Innovation*, Australian Society of Certified Practising Accountants, Melbourne.

Blair, M. (1999), "*Firm-specific human capital and theories of the firm, employees and corporate governance*", in Blair, M.M. and Roe, M.J. (Eds.), , The Brookings Institution, Washington, DC, pp. 58-90.

BOI (Board of Investment) (2000), *Board of Investment, Statutory agency responsible for promoting and facilitating foreign investments in Sri Lanka*. Available http://www.boisrilanka.org.

BOI (Board of Investment) (2003), *Annual Report 2003.* BOI Sri Lanka, Colombo.

Bosworth, D. and Yang, D. (2000), "Intellectual property law, technology flow and licensing opportunities in the People's Republic of China", *International Business Review*, Vol. 9, pp. 453-477.

Bozzolan, S., Favotto, F. and Ricceri, F. (2003), "Italian annual intellectual capital disclosure: An empirical analysis", *Journal of Intellectual Capital*, Vol. 4 No. 4, pp. 543-58.

Brennan, N. (2001), "Reporting intellectual capital in annual reports: evidence from Ireland", *Accounting, Auditing & Accountability Journal*, Vol. 14 No. 4, pp. 423-36.

Brooking, A. (1996), *Intellectual Capital: Core Assets for the Third Millenium Enterprise*, International Thomson Business Press, London.

Brooking, A. (1997), "The management of intellectual capital", *Long Range Planning*, Vol. 30 No. 3, pp. 364-5.

Brooking, A. (1999), *Corporate Memory: Strategies for Knowledge Management*, International Thomson Business Press, London.

Buckley, P.J. and Carter, M.J. (2000), "Knowledge management in global technology markets applying theory to practice", *Long Range Planning*, Vol. 33 No. 1, pp. 55-71.

Caddy, I. (2000), "Intellectual capital: recognizing both assets and liabilities", *Journal of Intellectual Capital*, Vol. 1 No. 2, pp. 129-46.

Cameron, J. and Guthrie, J. (1993), "External annual reporting by an Australian university: changing patterns", *Financial Accountability & Management*, Vol. 9 No. 1, pp. 1-13.

Central Bank of Sri Lanka Socio Economic Data (2001), Sri Lanka Socio-Economic Data 2001, Vol. 24, Colombo.

Clackworthy, S. (2000), "The value of reporting in the information age", *Management Accounting* (UK), Vol. 78 No. 3, pp. 38-9.

CMA (The Society of Management Accountants of Canada) (1998), *The Management of Intellectual Capital: The Issues and the Practice, Management accounting issues paper 16*, The Society of Management Accountants of Canada, Hamilton, Ontario.

Code of Intellectual Property Act No. 52 (1979), *Parliament of the Democratic Socialist Republic of Sri Lanka. Gazette of the Democratic Socialist Republic of Sri Lanka of August 10*, Government Publications Bureau, Colombo.

Code of Intellectual Property Act No. 40 (2000), *Parliament of the Democratic Socialist Republic of Sri Lanka, Gazette of the Democratic Socialist Republic of Sri Lanka of August 4*, Government Publications Bureau, Colombo.

Cooper, D. (1980), "Discussion of towards a political economy of accounting", *Accounting, Organizations and Society*, Vol. 5 No. 1, pp. 161-6.

CSE (Colombo Stock Exchange) (1998), *Annual Report 1998*, Colombo.

CSE (Colombo Stock Exchange) (1999), *Annual Report 1999*, Colombo.

CSE (Colombo Stock Exchange) (2000), *Annual Report 2000*, Colombo.

Daley, J. (2001), “The intangible economy and Australia”, *Australian Journal of Management*, 26, August, special issue, pp. 3-20.

Dixon, J. (2003), “Dear Jim”, *Australian CPA*, April, Available http://www.cpaaustralia.com.au

Dzinkowski, R. (2000), “The measurement and management of intellectual capital: an introduction”, *Management Accounting (UK)*, Vol. 78 No. 2, pp. 32-6.

Edvinsson, L. (1997), “Developing intellectual capital at Skandia”, *Long Range Planning*, Vol. 30 No. 3, pp. 366-73.

Edvinsson, L. and Malone, M.S. (1998), *Intellectual Capital*, Judy Piatkus (Publishers), London.

Edvinsson, L. and Sullivan, P. (1996), “Developing a model for managing intellectual capital”, *European Management Journal*, Vol. 14 No. 4, pp. 356-64.

Garcia-Ayuso, M. (2003), “Intangibles: lessons from the past and a look into the future”, *Journal of Intellectual Capital*, Vol. 4 No.4, pp. 597-604.

Guthrie, J. (2000), “Measuring up to change”, *Financial Management*, December, p. 11.

Guthrie, J. and Parker, L.D. (1990), "Corporate social disclosure practice: A comparative international analysis", *Advances in Public Interest Accounting*, Vol. 3 pp. 159-75.

Guthrie, J. and Petty, R. (2000), "Intellectual capital: Australian annual reporting practices", *Journal of Intellectual Capital*, Vol. 1 No. 3, pp. 241-51.

Howieson, B. and Langfield-Smith, I. (2003), "The FRC and accounting standard-setting: should I still call Australia home?", *Australian Accounting Review*, Vol. 13 No. 1, pp. 17-26.

Human Development Report (2000), *Human Development Index*, UNDP, New York.

IFAC (International Federation of Accountants) (1998), *The Measurement and Management of Intellectual Capital: An Introduction Study 7*, October, IFAC, New York.

IAS (International Accounting Standards) 38 (2003), *Intangible Assets*, International Accounting Standards Committee, London.

Isaak, R. A. (1991), *International Political Economy: Managing World Economic Change*, Prentice Hall, Englewood Cliffs, NJ.

Klein, D.A. (Ed.) (1998), *The Strategic Management of Intellectual Capital*, Butterworth-Heinemann, Woburn, MA.

Knight, D.J. (1999), "Performance measures for increasing intellectual capital", *Planning Review*, Vol. 27 No. 2, pp. 22-7.

Lev, B., Sarath, B. and Sougiannis, T. (1999), *R&D reporting biases and their consequences*, paper presented at 2nd Intangible Conference in New York City, Intangibles Management, Measurement and Organization, New York, May 27-28.

Litschka, M., Markom, A. and Schunder, S. (2006), "Measuring and analyzing intellectual capital assets: an integrative approach", *Journal of Intellectual Capital*, Vol. 7 No. 2, pp. 160-73.

Marr, B., Mouritsen, J. and Bukh, P.N. (2003), "Perceived wisdom", *Financial Management*. July/August, p. 32.

McSheehy, W. (2001), *Sri Lanka: Corporate Location*, July/August, pp. 49-57, London.

Miller, M. (2003), "The global accounting standards gamble: all the way with no delay?", *Australian Accounting Review*, Vol. 13 No. 1, p. 2.

Nasseri, T. (1998), Knowledge leverage: The ultimate advantage. Available http://www.brint.com/papers/submit/nasseri.htm

Niemark, M.K. (1995), *The Hidden Dimensions of Annual Reports: Sixty Years of Social Conflict at General Motors*, Markus Wiener, Princeton, NJ.

Nonaka, I. (1991), "The knowledge-creating company", *Harvard Business Review*, Vol. 6 No. 6, pp. 96-111.

Olsson, B. (2001), "Annual reporting practices: Information about human resources in corporate annual reports in major Swedish companies", *Journal of Human Resource Costing and Accounting*, Vol. 6 No. 1, pp. 39-52.

Ordonez de Pablos, P. (2005), "Intellectual capital reports in India: lessons from a case study", *Journal of Intellectual Capital*, Vol. 6 No. 1, pp. 141-9.

Picker, R. and Hicks, K. (2003), "Derecognition looms for intangibles", *Australian CPA*, June, p.78.

Romer, P.M. (1998), "Two Strategies for Economic Development: Using Ideas and Producing Ideas", in Klein, D.A. (Ed.), *The Strategic Management of Intellectual Capital*, Butterworth-Heinemann, Woburn, MA, pp. 213-218.

Roos, G. and Roos, J. (1997), "Measuring your company's intellectual performance", *Long Range Planning*, Vol. 30 No. 3, pp. 413-26.

Roos, J., Roos, G., Dragonetti, N.C. and Edvinsson, L. (1997), *Intellectual Capital, Navigating the New Business Landscape*, Macmillan Business, London.

Saint-Onge, H. (1998), "How knowledge management adds critical value to distribution channel management", *Journal of Systemic Knowledge Management*, January. Available http://www.free-press.com/journals/knowledge/issue1/article1.htm

Simister, M., Roest, P. and Sheldon, J. (1998), *CFO of the Future*, Institute of Chartered Accountants in Australia, Sydney

SLAS (Sri Lanka Accounting Standards) (1997), The Institute of Chartered Accountants in Sri Lanka, Colombo.

SLAS (Sri Lanka Accounting Standards) (1999), The Institute of Chartered Accountants in Sri Lanka, Colombo.

SMAC (Society of Management Accountants of Canada) (1998), *The Management of Intellectual Capital: The Issues and the Practice*, The Society of Management Accountants of Canada, Mississauga.

Stewart, T.A. (1997), *Intellectual Capital: The New Wealth of Organizations*, Nicholas Brealey, London.

Subbarao, A.V. and Zeghal, D. (1997), "Human resources information disclosure in annual reports: an international comparison", *Journal of Human Resource Costing and Accounting*, Vol. 2 No. 2, pp. 53-73.

Sveiby, K.E. (1997a), *The New Organizational Wealth: Managing and Measuring Knowledge Based Assets* (5th edn.), Barrett-Koehler, San Francisco.

Sveiby, K.E. (1997b), "The intangible assets monitor", *Journal of Human Resource Costing and Accounting*, Vol. 2 No. 1, pp. 73-97.

The Sunday Times (1999a), Including intellectual capital, Vijeya Publishers, Colombo, October 31, p. 6.

The Sunday Times (1999b), Bringing the value of the human asset into the balance sheet, Vijeya Publishers, Colombo, October 31, p. 6.

The World Bank (2004), *Sri Lanka Development Policy Review*, December, The World Bank Colombo office, Colombo.

Thorne, K. and Smith, M. (2000), "Competitive advantage in world class organizations", *Management Accounting* (UK), Vol. 78 No. 3, pp. 22-6.

Ueng, C.J., Kim, S.H. and Lee, C.C. (2000), "The impact of firm's ownership advantages and economic status of destination country on the wealth effects of international joint ventures", *International Review of Financial Analysis*, Vol. 9 No. 1, pp. 67-76.

Ulrich, D. (1998), "Intellectual capital = competence x commitment", *Sloan Management Review*, Vol. 39 No. 2, pp. 15-26.

UNDP Sri Lanka (1998), *National Human Development Report Sri Lanka 1998*, Colombo.

USAID (U.S. Agency for International Development, Sri Lanka) (1998), *Sri Lanka Competitiveness Study*, Colombo

Vandemaele, S.N., Vergauwen, P.G.M.C. and Smits, A.J. (2005), "Intellectual capital disclosure in The Netherlands, Sweden and the UK", *Journal of Intellectual Capital*, Vol. 6 No. 3, pp. 417-26.

Vergauwen, P.G.M.C. and van Alem, F.J.C. (2005), "Annual report IC disclosures in The Netherlands, France and Gernmany", *Journal of Intellectual Capital*, Vol. 6 No. 1, pp. 89-104.

Volberda, H.W., Baden-Fuller, C. and van den Bosch, A.J. (2001), "Mastering strategic renewal, mobilising renewal journeys in multi-unit firms", *Long Range Planning*, Vol. 34, pp. 159-78.

Wickremaratne, K.T. (2000), Intellectual property plays a vital role in the overall economic development of any country, Ceylon Daily News, 21 June, Lakehouse Publication, Colombo.