

Regulation, Human Capital and Increasing the Level of Transparency in Investment Recommendations

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Abstract

Regulatory agencies, the financial community and the investing public need to be aware that more effective investment recommendations and decisions require human capital analysis. It is important to the work of securities analysts, their clients and their industry. Bassi, Lev, McMurrer and Sissfield (2001) suggest that non-financial insights, particularly human capital related insights, make up a large proportion of investment decisions. More rigorous qualitative human capital analysis can illuminate the working of an organisation in a way that primary financial data on its own cannot achieve need. A model for outlining the human resource drivers of sustainable human capital is introduced and discussed in response to this need. In essence, an integrated approach is needed for the purpose of making more transparent investment recommendations. In Australia the Regulatory Agency, the Australian Securities and Investment Commission can assist in the adoption of this integrated investment process through the Training of Financial Product Advisors, Licensing Policy Statement 146.

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Introduction

Dr Greenspan, Federal Reserve Chairman notes that ‘a myriad of federal agencies and regulations have grown over many years to take the place of business integrity and reputation – qualities that dominated business relationships in the 19th century. Despite the plethora of laws in the past century they have not eliminated the less savoury side of human behaviour. Corporate malfeasance over the past decade has led to the re-emergence of a market value for trust and reputation in business’ (Aylmer, 19 April, 2004: 10).

To this end the media, investing public, regulatory agencies, and politicians have become increasingly concerned with the credibility problems associated with the independence and objectivity of brokerage houses and their securities analysts’ (sell-side) research products. Newspaper headlines, both globally and locally, have echoed such common sentiments as ‘Deals and Deal Makers: Outlook for Analysts: Skepticism and Blame’ (Gasparino 2001) in the *Wall St Journal*, (13 June 2002, c1); ‘Shoot All the Analysts’ in the *Financial Times*, (20 March 2001: 21); ‘Analysts on Wall Street, Sell? Dishonest research, gullible investors’, *The Economist*, (11 May 2002: 68); ‘Wall Street, What Glitters ain’t gold’, *The Economist*, (13 April 2002: 70); ‘Stockbrokers Under Pressure’, by Collins (2002) in *The Australian Financial Review*, (23 May 2002: 20); ‘Research Shake-Up On The Cards’ by Whyte (2002) in *The Australian Financial Review*, (23 May 2002: 21); ‘Investors Seek to Recoup Millions’, *The Australian Financial Review* (23 May 2002: 20) and ‘The Truth about Australian Stockbrokers’, ‘Australian Stockbrokers Exposed’, by Clegg and Whyte (2002) in *The Weekend Australian Financial Review* (25-6 May 2002: 1:21-3).

At the heart of the controversy is the validity of the research products of sell-side securities analysts who work for brokering houses. They may be compromised by the ‘disparate incentives of investment banks’ clients (‘investors’) on the one hand who want unbiased research, and those of most corporate financing clients (‘issuers’) who benefit from optimistic research’ (Boni and Womack, 2002:1).

The increasing levels of controversy and concerns about the objectivity and independence of sell-side research and the current moves both globally and locally to take a number of actions to improve credibility call for a range of possible solutions to be debated. There are a number of critical issues which need addressing however. The first of these are associated with the exact nature of what securities analysts and their clients, the investment manager actually do, and what is included, and what is excluded, in the securities analysts’ investment research product. Closely intertwined is the challenge to be faced by the Australian Securities and In-

vestment Commission and current licensing regulations pertaining to the training of financial products advisers. Central to these issues is the pressing need, in the continuous disclosure environment which has been operational in Australia since 1994 (Gallery, Gallery and Hsu, 2002) and, specifically, the voluntary industry guidelines, to provide the investing public with transparency in investment recommendations.

This is a substantive issue, as research Szarycz (2001) indicates that more than 50 per cent of shares issued by US based companies have become controlled by institutional investors who are becoming increasingly concerned with the evaluation of a firm's internal performance. Often, these measures are primarily quantitative and financial, and use measures such as Economic Value Added (EVA), Cash Flow Return On Investing (CFROI), Balanced Scorecard, Value Based Management (VBM) and Activity Based Costing (ABC).

However, the central themes of this paper are firstly, that the roles of securities analysts and investment managers are misunderstood by most investors. Their nominal function is to form investment recommendations or investment decisions about the buying and selling of publicly listed businesses. Most investors believe that their roles involve making an assessment of a business's current and prospective financial condition, using predominantly financial data collection techniques, financial modelling and other financial research tools. However, in fact, making investment recommendations and decisions about the acquisition or sale of a business also requires knowledge specific competencies in assessing the value of human capital. Human Capital analysis needs to be incorporated in the investment process if these professionals are to formulate sound investment decisions (Royal, 2000). Secondly, in order to collect and analyse human capital data, research techniques outside of those adopted for assessing the current and prospective financial condition of publicly listed companies are also required. Current analytical techniques rely heavily on the analysis of financial data to create models, which then form the basis of earnings estimates and most recommendations and investment decisions. Most of these models use lag indicators of past performance rather than lead indicators of future performance. The latter are better predictors and are more likely to be gleaned from a systematic examination of human capital data (Watson Wyatt Worldwide Research 2002). Qualitative techniques in assessing the value of human capital can be used in conjunction with the current techniques used by securities analysts to forecast future financial performance. Post-Enron, it is clear that the intangible drivers of a firm's value are increasingly important in predicting its future performance. Professor Chris Ittner, (2002) Wharton accounting professor, admits that compa-

nies often move beyond the obvious deduction of tangible assets from market value to gain a value of intangible assets, but, in fact, do not have systematic measures for intangible assets. Wharton researchers have tried to overcome this problem by creating what they call the Value Creation Index. Innovation ranked first, followed by management and employee quality. One of the lowest ranked characteristics was mastery of technology. To assess the data available on these characteristics, tools other than traditional financial analysis tools are required.

This is not to say that securities analysts and the equity markets are currently not performing to a high level. The public buying for the blood of the analysts may not be an accurate reflection of need for more structural reform within the capital markets themselves. The point made by *The Economist* (8 June 2002: 11-12) is that, in spite of the recent corporate scandals,

America's capital markets have done a pretty good job for the economy. All the evidence is that deep and liquid capital markets are quicker, cheaper and more efficient, if sometimes more brutal, than it is when done by banks. The country's equity culture should be praised and needs to be revived, not tossed out of the window.

Regulatory overreaction may actually underestimate the good work done by analysts. Even so, the author of this paper argues that the traditional, quantitative, financial research investment product and the investment process need to change.

This paper poses a key question: 'Can securities analysts, their clients, and their industry benefit from systematically embedding qualitative human capital analysis alongside quantitative financial analysis for the purpose of making more transparent investment recommendations?' Central to this question is the need for the Australian Securities and Investment Commission (ASIC) to articulate specific knowledge based requirements in human capital through its regulatory licensing process.

The paper forms part of a wider study, which examines the nature of work in the turbulence of mergers and acquisitions in investment banking in Australia (Royal 2000; 2003). For the purposes of this paper, *human capital* refers to the sustainability of people management systems which are likely to have an impact on the share price of a firm. *Sustainable* human resource management systems are those which are internally consistent, and reflect the firm's corporate strategy and the broader context in which the firm is operating.

Finally, this paper posits that the regulatory agency, the Australian Securities and Investment Commission must take an active role in ensuring that the necessary changes occur.

Understanding What Securities Analysts Do: Implications for the Regulator

There are three Commonwealth Government regulatory bodies in Australia's financial system. The Reserve Bank of Australia (RBA) regulates monetary policy and monitors the stability of the financial system. The Australian Prudential Regulation Authority (APRA) regulates the safety and soundness of banks or deposit-taking institutions, life and general insurance companies and the larger superannuation funds. The third of the Commonwealth Government regulatory bodies is the Australian Securities and Investment Commission (ASIC) which was established by the ASIC Act 1989. The Commission 'enforces company and financial services law to protect consumers, investors and creditors and informs the public about Australian companies, financial markets, financial services organisations and professionals who deal and advise in investments, superannuation, insurance and deposit taking' (ASIC *Annual Report*, 2000-2001: 1).

In its capacity to regulate how financial services organisations and their representatives deal with clients/consumers, the Australian Securities Investment Commission through one of its Directorates, the Financial Services Regulation Directorate, is responsible for regulating Investment Advisers. It does this by licensing them and by setting standards for their education, training and operations (ASIC *Annual Report*, 2000-2001: 1).

The Australian Securities and Investment Commission annual report (2000/2001: 60) indicates that there are 2,250 securities dealers, inclusive of securities analysts, in Australia. Generally, these securities analysts are employed by a brokerage firm, bank or investment banking institution. However, current organizational structures require securities analysts to meet the needs of diverse stakeholders. The April 2001 issue of *Institutional Investor* quotes the chief investment officer for 'large cap value' stocks for Putnam Investments as saying, 'Our approach to the market generally has been that sell-side analysts are serving so many masters besides us that we increasingly need to rely on our own research' (Schack, 2001).

The Commission sets out Regulations 146 'Licensing: Training and Financial Products Advisers' and 164 'Licensing: Organisational Capacities, Educational Levels'. Financial organisations need to ensure that their nominated responsible officers have the knowledge needed for their roles. Holding a relevant industry or degree qualification in a relevant financial/accounting or business discipline is a common element. The specialist knowledge needed by securities analysts, dealers and investment managers typically includes an understanding of the operation of

securities markets, types of financial/investment products and most importantly theories of investment portfolio management and risk (Regulation; Policy Statement, 146: Appendix 2.2).

An analysts' nominal function is to conduct thorough research investigations into all aspects of the current and prospective financial condition of publicly listed companies and to provide an analysis of the findings in the form of a research report, which serves as a basis for making an investment recommendation (Royal and Althausser, 2003). Recommendations are made on a 'relative basis comparing a companies' performance within a sector or industry and examinations should cover all pertinent publicly available information about the company and its business. It is not limited to financial statements, [and includes] research on the company, industry, product or sector, and public statements by and interviews with executives of the company, its customers and suppliers' (Fernandez 2001: 3). Investment managers make decisions on the basis of these recommendations as well as those made by their own buy-side analysts as to which stock investments to buy or sell on behalf of investors.

In terms of their job characteristics, securities analysts and investment managers are occupational knowledge intensive specialists. Their tasks involve more than information dissemination, and include also a continual cycle of data collecting on an industry or individual company. The data are collected from customers, suppliers and management and processed by applying complex theoretical financial models and specialised knowledge. The output takes the form of earnings estimates and stock recommendations and stock selection decisions (Royal and Althausser 2003: 223).

The primary source of data for securities analysts in forming their recommendations is financial data. This is consistent with the prominence of financial models such as the Capital Asset Pricing Model (CAPM) and its variations, as well as the significance of the analysis of the beta (market volatility) of a stock (Mitchell, 2001). Financial analysis of this kind is consistent with the qualifications, experience and skill set of most securities analysts in Australia. Research evidence into the Equities division of two local foreign-owned investment banks suggests that securities analysts are seen to be 'elite of the Equities business in terms of knowledge base and intellect with 93 per cent of people having an undergraduate qualification in Finance, Business [or specialised fields such as Engineering] and over 50 per cent having a postgraduate degree or diploma in Finance, Commerce, or Business Administration' (Royal, 2000: 172, 173; Royal and Althausser, 2003: 223).

However, in fact the role of security analysts, dealers and investment managers involves much more than financial analysis alone. Generating

investment recommendations and, in the case of the investment manager generating investment decisions about the buying and selling of publicly listed businesses, involves more than simply an assessment of a business's current and prospective financial condition, using predominantly financial data, financial modelling techniques and other financial research tools. Securities analysts and investment managers also need to assess share price sensitive areas such as sustainable human resource management practices, ongoing organisational change programs and corporate culture and their links to corporate performance. All of these factors can be grouped under the general term of human capital. However few analysts and investment managers have, or have access to, the competencies needed to make such assessments. Sophisticated skills in qualitative research are and have always been important in order for this complementary human capital analysis to take place. Currently, analysts and indeed investment managers have routinely considered qualitative interview techniques to be important particularly when it comes to 'management quality' issues in their data collection process. There is however little evidence of any consistency in the qualitative techniques being adopted or anything like the methodological rigour applied in quantitative areas of analysts. Such qualitative techniques are becoming increasingly important for securities analysts and investment managers as they continue to access non-financial data in making earnings forecasts but they seem unaware of this.

Table 1. Selected Examples of Qualitative Research Techniques for Human Capital Analysis

Structured and semi – structured interviews
Content analysis of interview data and documentary sources.
Industry performance analysis
Survey instruments (application of statistical analysis)
Media analysis
Archival and historical analysis
Focus Groups
Oral histories
Corporate ownership analysis
Participant observation

Appropriate methodologies for analysing human capital include: qualitative case study techniques, i.e. interviews, participant observation, surveys, oral histories, archival, documentary analysis and content analysis, refer to Table 1 (Royal, 2000). What we have is a situation where these professionals are largely unaware that the methods they currently employ in assessing non-financial data are outdated and ineffective. The available training in the area has missed methodological research developments that are readily adaptable to the assessment of non-financial data.

Forces for Changing the Research Products of Securities Analysts

One of the critical forces for change in this area is the increasing public dissatisfaction with both the process and the performance of financial analysts, both in Australia and in the US, as noted in the newspaper headlines above. This dissatisfaction is exacerbated in a more volatile economic climate. There is the opportunity to improve performance in this area. Research by Watson Wyatt Worldwide Research (2002) links specific human resource management practices to above average returns to shareholders. The data indicates that human capital significantly affects current and prospective financial future performance. Furthermore, the data suggest, superior human capital management is a leading – rather than lagging – indicator of improved financial success.

Using survey data from 51 organisations in North America and Europe, administered in 1999 and 2001, the researchers divided organizations into three groups based on their overall Human Capital Index (HCI) scores. The HCI was derived from matching survey data to market value, returns to shareholders and Tobin's Q to create an index of human capital. Using the organizations' five-year total returns to shareholders, the researchers found that organizations with a low HCI averaged a 21 per cent five-year return, those with a medium HCI averaged 39 per cent and those with a high HCI averaged 64 per cent. This analysis noted that human capital is the chief resource for innovation in the knowledge-based economy, and, once it can be measured, it can be managed and exploited to increase shareholder value. Other recent studies support these findings and we discuss these below.

Therefore, it is important that securities analysts, who inform the financial markets on stock recommendations, have access to the qualitative human capital tools as well as the quantitative financial tools to analyse these drivers of future growth and change. Securities analysts need to understand and to report on the lead, as well as the lag indicators of

future financial performance. The share price sensitive issue of human capital cannot be rigorously measured only in traditional, financial terms. Non-financial data must be accessed, in a valid and systematic manner, in order to fully analyse these important performance indicators in order to make more transparent recommendations.

In a regulatory environment in which Australian companies are compelled to provide continuous disclosure of share price sensitive information, securities analysts find themselves in an increasingly competitive environment. Their ongoing challenge is to develop unique, timely insights for their clients, the fund managers. In these circumstances the argument for embedding qualitative research techniques, alongside their traditional quantitative financial tools, becomes even more compelling.

Also, in an environment in which the investing public has had a crisis of confidence in investment professionals, it is highly appropriate for securities analysts to be, and to be seen to be, exercising due diligence, and conducting the most thorough analysis possible to ascertain the prospective financial condition of a publicly listed company. Evidence from the Watson Wyatt (2002) study indicates that quantitative financial analysis, on its own, is not adequate in providing the fullest possible recommendations to the investing public of the prospective financial state of a publicly listed company. To ignore this runs the risk of failing the due diligence test.

Limitations of Quantitative Financial Analysis

There are a number of ways of conducting equity research. The securities analyst has some element of choice between quantitative financial data, which is very valuable and, most often is 'hard', objective and rigorous, and that which is qualitative and is seen (by financial analysts) as a 'soft' approach. However, academic researchers find that quantitative financial research, on its own, can impede true analytical understanding of an organisation's performance as quantitative financial data often show that properties shared by all organisations in a sample or in an industry sector, such as banking, may be superficial, obvious or unimportant. Quantitative standard financial measures applicable to all organisations in an industry sector may ignore or understate the differences between organisations within their sector. Quantitative financial research minimises the importance of individual social, ethical and management practices, complexity and variety in organisations.

By contrast, qualitative human capital research can make a significant contribution to assessing organisational performance because it is 'rich, real and preserves the chronological flow of human capital strate-

gies and practices. It requires minimal front-end instrumentation, and reports produced often have a quality of undeniability which, when used in conjunction with quantitative [financial] data in the same organisational setting, can produce a more powerful and more valid analysis [of current and prospective financial performance]' (Miles, 1979: 590).

Excellent equity research should incorporate both quantitative financial and qualitative human capital research. Together, these techniques provide a more integrated understanding of the dynamics and performance aspects present within different organisational settings. A 'best-of-both worlds' approach, which describes and explains organisational systems, management practices and processes, will ultimately lead to better informed investment decisions.

This, however, is not likely to be easy or quick. As noted by Dunphy (2000), some elements in the financial markets are starting to appreciate the limitations of purely financial measures as an indicator of future performance. To compensate, new measures are being developed, which focus on intangible assets, including customer capital, and structural capital. Dunphy (2000) argues that stakeholders as varied as stock exchanges, accountants, auditors and shareholders all have a strong interest in developing better indicators of viability and sustainability than are offered by the traditional financial measures. The move to triple bottom-line accounting could be seen as part of this process. Given the primary competencies of securities analysts in financial analysis, traditional financially based analytical practices may be slow to change.

The fundamental analysis approach is also consistent with a systems view of organizations, in which a firm is seen in the context of its broader environment, and internal and external connections and interdependencies are made explicit (Senge, 1992; Lewin and Regine, 1999; Trevelyan and O'Donnell, 2001). According to systems theory, most complex systems respond to their environment, adapt and often become even more complex as they continue to evolve. Observers of organizations, including securities analysts, need to be aware of the complexity of the system, whether it is an open or closed system, and the potential ripple effects of changes in structure, strategy and process (Trevelyan and O'Donnell, 2001). Standard quantitative financial analysis does not fully account for this increase in complexity, and the potential effects on financial performance.

Open systems theory, as articulated in Flood and Jackson (1991) is also relevant to the concept of the sustainable corporation. Open systems theory attempts to describe how open systems relate to the environment, and how systems contain elements which are interdependent and intradependent. This is congruent with the move towards seeing organisations as having

elements of both closed and open systems (Gebert and Boerner, 1999), and the organisations' interdependence with community and the context in which it operates (Blattel-Mink, Kramer and Mischau, 2000; Googins, 1997; Lewis, Kagan and Heaton, 2000; Glendon, 1998). The organisation's impact on the community and the environment will be an increasing factor in assessing its future financial viability and market value.

Stacey (2001) suggests that qualitative human capital tools need to be used in conjunction with quantitative financial tools in order to access the reality of the organizational culture, in which knowledge is actually used by individuals in the firm. This requires a high level of understanding of organizations' cultural issues, such as interpersonal communication, both formal and informal (Carlopio and O'Donnell 1994), particularly in knowledge-intensive, network organizations (O'Donnell, 1994).

The move to the concept of creating more sustainable organizations, as espoused by Dunphy and Griffiths (1998) and Roome (1998) can be seen within the interdependence inherent in open systems. Just as organizations need financially and environmentally sustainable practices, organizations also need socially sustainable practices to prosper in the long term (Glendon, 1998; Senge, 1992).

Regulatory Challenges and the Qualitative Human Capital Research Evidence

The competencies of traditional equity research securities analysts and investment managers rely heavily on making 'quantitative forecasts typically expressed as numeric estimates of future earnings, including point estimates, range estimates and open-ended (maximum or minimum) estimates' (Gallery, Gallery and Hsu, 2002: 10), and collecting and incorporating new information on an industry, or individual stock into their analysis and financial models in order to make recommendations to their clients through oral or written reports (Michaely and Womack, 1999).

In contrast, qualitative analyses of human capital adopt a wide range of organisational case study techniques. These techniques include: interviews of management and staff, focus groups, historical analysis, oral histories participant observation, surveys, content analysis, archival and documentary sources. Other approaches are listed in Table 1. Qualitative research can highlight the complexity of issues surrounding the drivers of the value of the firm. As Hakim (1987) notes, qualitative research can be used in an intellectually rigorous manner, and can offer a richly detailed 'portrait' as a preliminary process to further investigation. A theoretical overview can be seen in the discussion of the configurational approach defined by Delery and Doty (1996). In the highly interdependent system contemporary

organization, quantitative, financial data and qualitative, human capital data are both essential for understanding the drivers of sustainable growth.

Qualitative is different from quantitative financial research in that exploration, description and explanation can be 'illuminating in one context blur our sight in another' (Royal, 2000: 58; Gummesson, 1976: 76). Securities analysts who adopt multiple sources of evidence increase the transparency of any research products.

Human capital research study in the Australian investment banking industry by Royal (2003), Royal and Althausser (2002), Royal (2001), Royal (2000), and another study of US human capital (Kalleberg, Knoke, Marsden and Spaeth, 1996) found that sustainable people-centred practices (that emphasise long term relationships with their employees, and which view the employment relationship as being more than one party in a straightforward economic exchange and which encourage organisational membership) lead to superior product development and innovation, attraction and retention of good staff and ultimately improved financial performance.

A Boston Consulting Group study of one hundred companies in Germany, covering ten industrial sectors over a seven year period from 1987-1994 (Bilmes, Wetzker and Xhonneux, 1997), found that those companies which produced a greater total shareholder return than their competitors also scored highly on such measures as: expenditure per employee, contribution of employees as reflected in mission statements, promotion opportunities and flexible work hours, among other innovative human resource management practices. The emphasis in the more successful companies was on building employee capacity.

In support of these findings, a study by Collins (2001) compared companies in the same industry which sustained success over many years with those that had not. The methodology used by Collins was an innovative combination of traditional financial analysis, complemented by a selection of qualitative approaches. Collins screened companies using Fortune 500 data, then CRSP data, then by industry and was left with eleven companies from which demonstrated long-term sustainability of both financial and human capital. He found those companies which achieved sustained long-term performance behaved differently from those whose performance was erratic or poor. Visionary companies put a greater percentage of year's earnings back into the company, returning less in cash dividends to shareholders. Visionary firms invested more heavily in management practices and human capital – specifically in training, recruiting and the professional development of staff – and in R&D and property and plant. These companies were also early adopters or innovators in their industry (Collins and Porras, 1994). This distinc-

tive pattern of behaviour had impressive results; visionary companies outperformed the US market by a factor of 15 at the time of the study. They were six times more successful than the comparison companies.

Another research study Schuster (1986) also aimed to assess the critical contribution of human capital. He used employee surveys and interviews of 1300 of the largest U.S. industrials and non-industrials to research whether a significant relationship exists between the ways in which organisations manage their employees and profitability. His findings showed a statistically positive relationship between the use of employee-centred management practices and superior financial performance. Also, an average return on equity of those firms at the time using one or more innovative HR practices was 11 per cent higher than those firms not using any of the practices.

Another specific example of the value of human capital highlights the fundamental primacy of human capital in mergers, takeovers and alliances in high technology firms (Ranft and Lord, 2000). The researchers show that strategically significant intellectual property, in some cases, rests within individuals, rather than with the firm itself. Also, other researchers have also demonstrated that knowledge management can have an impact on the efficiency and the performance of the firm (Gupta, Iyer, and Aronson, 2000). Analysts need to be assessing these factors more systematically as we move into a knowledge-based society.

A study by the American Management Association (1966) indicated a strong correlation between increased training budgets and larger profits and productivity flowing from workforce reductions. The study found that organisations performed better when they were strategically well-positioned in the changing environment and pushed the pace of internal organisational change fast enough to match the external pace of change (cited in Dunphy, 2000).

Turner and Crawford conducted a major study of 243 case studies in Australia and New Zealand to determine the capabilities that drive corporate performance (Turner and Crawford, 1998). They found that specific clusters of competencies affect performance, including business technology (operational ie current business performance), market responsiveness (operational), performance management,(operational and reshaping for change effectiveness), engagement and development of employees (reshaping). Quantitative financial analysis, as typically used by securities analysts, would not be able to distinguish these performance-related capabilities.

A study conducted by Kotter and Heskett (1992) looked at corporate culture and its effect on performance. Their findings show that corporate culture has a major effect on corporate performance and, although difficult

to change, corporate culture can be made more performance enhancing. Also, researchers O'Reilly and Pfeffer (2000) examine successful companies that use ordinary people to achieve extraordinary results and find that organisations that have well-articulated values, puts culture first, have a strong alignment and consistency in the people-centred practices that express those values, and where senior management maintain these values, are able to compete very successfully. Dunphy and Stace (2001), provide case studies of companies which improved financial performance as a result of appropriate leadership styles and change management strategies.

In terms of predicting future performance, extensive research by Cox and Blake (1991) concluded there are six areas where specific human capital practices are highly related to organisational performance. For instance, sound diversity management can create a competitive advantage through: cost advantages – through savings in integrating poor workers; resource acquisition companies known for being good employers of women and ethnic minorities attract the best of the labour pool; marketing – diversity increases cultural sensitivity across and within cultures; creativity – heterogeneous groups tend to be more creative because of the wider range of views held by group members, and because of the potential for synergy; problem solving – similar to creativity, a more heterogeneous group tends to explore issues from a diverse range of perspectives and system flexibility – in a diverse organization, the organizational systems become more fluid, less standardized and offer greater potential flexibility. Securities analysts need to be able to assess these practices systematically.

Researchers such as Royal (2000), Collins (2001), Dunphy (2000), Turner and Crawford (1998), Watson Wyatt Worldwide Research (2002) and Bassi et al. (2001) use rigorous qualitative techniques to provide evidence for their findings on the positive relationship between sophisticated use of human capital and future financial performance of the firm. Examples of these techniques appear in Table 1. Few of these techniques are commonly used by securities analysts to calculate earnings forecasts. This body of research strongly indicates the value to securities analysts, and their clients, of systematically embedding insights from both qualitative human capital analysis and quantitative financial analysis in making more transparent stock recommendations.

Deriving a Model for Analysing Human Capital

Studies carried out by Royal (2000, 2002), in the investment banking industry used surveys and interviews across all levels of the organization, participant observation, archival and business documentation, oral histo-

ries and content analysis, (see Table 1) to determine key indicators, and drivers of performance. In light of these studies and those discussed in the previous section, Figure 1 led Royal to develop the model which appears in 'Figure 1: Drivers of Sustainable People Management Systems' which indicates the important role of human capital analysis in understanding the drivers of the value of the firm. It illustrates the drivers of sustainable people management systems and the importance of various interrelated features that recur throughout a company's history. These features include changing internal and external pressures and managerial beliefs and perceptions, all of which interact and shape management strategy, ultimately resulting in the adoption of internalised labour market structures that are appropriate to a company and within its industry.

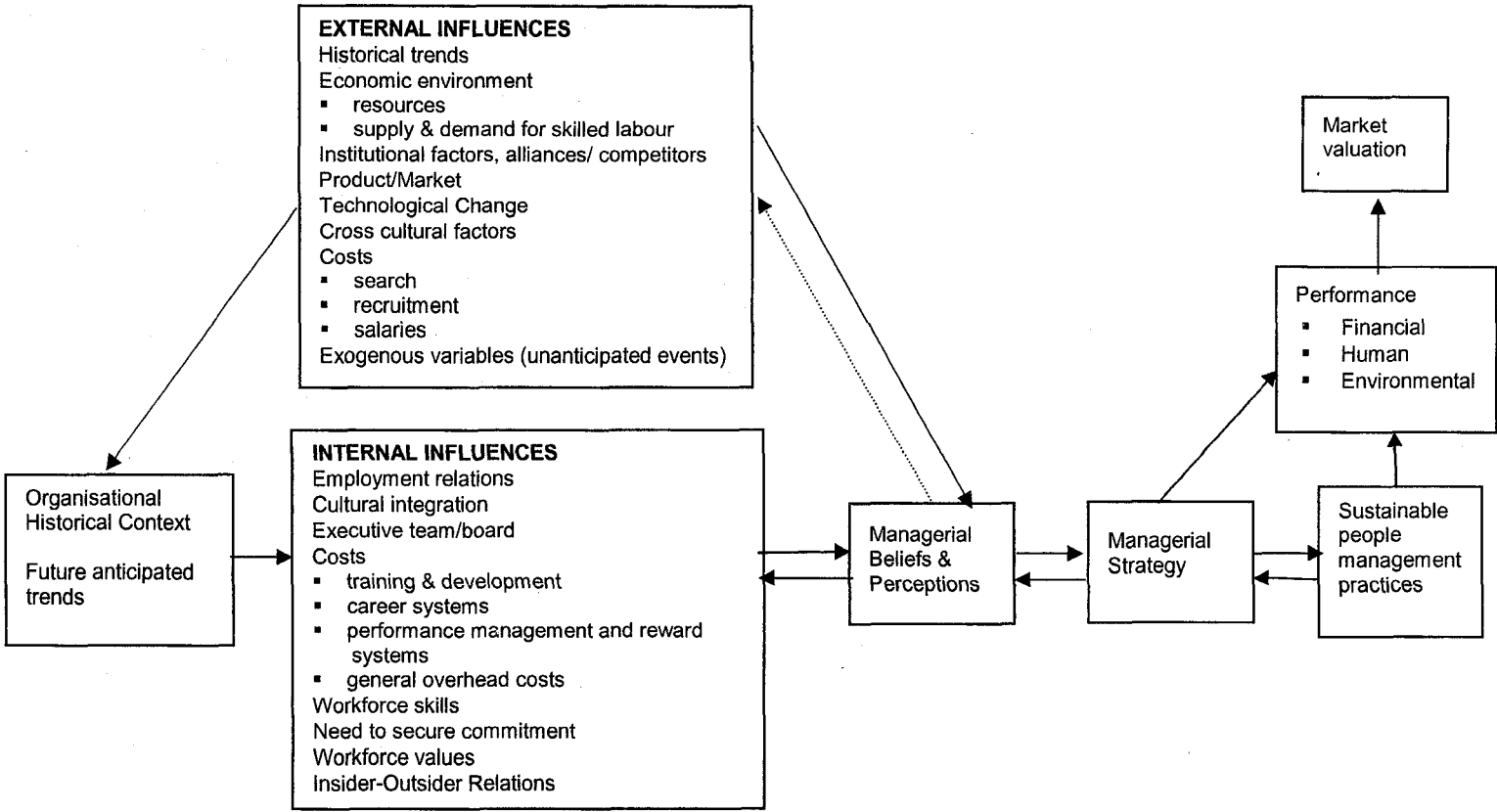
More specifically, internal influences that affect managerial beliefs and perceptions and management strategy include the state of the employment relations, cultural factors, costs associated with the need to secure commitment of employees (such as reward, performance management, career and development systems) and insider-outsider relations.

External influences that affect managerial beliefs and perceptions and management strategy include historical trends, the competitive nature of the economic environment, institutional factors, the nature of the product, technological changes and the costs associated with recruitment. It is crucial to state in any qualitative analysis of this kind that whilst the internal and external influences are interrelated, they have not evolved in a linear fashion.

By considering a company's development over time, the features discussed in the model above should serve only as a guide to what drives sustainable people management systems and not necessarily as a blueprint for the conclusive reasons for their existence in every company, across a variety of industries at any one time. The model cannot explain the exact order of their occurrence, for the simple reason that each company has its own unique history, often with gaps, which over time lends itself to more or less emphasis on one or more features discussed in the model.

However, while it is unlikely that one can simply ascertain the exact casual relationship, the application of this qualitative model (as seen in Figure 1) will provide a level of analysis which would form the basis of a complementary equity research product. Using this model, securities analysts and investment managers would be able to identify emerging patterns in human capital that ultimately affect financial performance and market valuation. This would go some way to providing the investing public a more accurate and transparent information about the nature of a publicly listed company's current and future financial performance.

Figure 1. Drivers of Sustainable People Management Systems



Regulatory Challenges for the Australian Securities and Investment Commission

As mentioned earlier the skill base of securities analysts is strongly geared towards quantitative financial analytical techniques, with 93 per cent of people having an undergraduate qualification in Finance, Business [or specialised fields such as Engineering] and over 50 per cent having a postgraduate degree or diploma in Finance, Commerce, or Business Administration (Royal, 2000: 172, 173). The research evidence discussed earlier indicates that there is an increasing need to broaden the knowledge requirements to include qualitative human capital competencies. We argue here that the Australian Securities and Investment Commission needs to assume a significant role in upgrading the skills of security analysts in this area.

Currently, however, securities analysts have qualifications in finance, accounting, business, commerce and economics, which enable them to conduct financial analysis, estimate earnings and make investment recommendations (Royal, 2000; Royal and Althausser, 2003). Just as securities analysts require the appropriate competencies, skills, knowledge and abilities in order to form earnings estimates and investment recommendations, different competencies, skills and knowledge and abilities are required to meet the demands of the analysis of human capital. These include qualifications and/or formal training in the fields of sustainable human resource management, organisational change and/or organisational behaviour and their links to corporate performance. As well as qualifications and/or formal training in qualitative research techniques, i.e. interviews, participant observation, surveys, oral histories, historical/archival and documentary analysis, and content analysis (see Figure 1) is also needed.

In order for there to be a complementary human capital qualitative oriented equity research product which would allow for more transparent investment recommendations to occur, there are five possible options:

- Securities analysts and investment managers undertake additional formal degree qualifications to provide the theoretical underpinnings in human capital analysis. This education would draw on the fields of sustainable human resource management, organisational change and organisational behaviour. It would also include training in formal qualitative research methodology. This would involve consultation with university and other diploma qualifying institutions. Formal qualifications are currently an important part of the underpinning knowledge requirements specified in Policy Statement 146.117

(ASIC Policy Statement 146 Document, 2001: 26), therefore ASIC through its Financial Market Regulation directorate is central to any future changes in the knowledge educational competencies to meet the licensing requirements.

- The Australian Securities and Investment Commission through its Financial Market Regulation Directorate should initiate a consultation process to broaden Policy Statement 146.117: Knowledge Requirements Specialist Securities and Dealers Competencies outlined in Table A2.2, A2.3 and the Managed Funds Table A2.4 to include Theories of Human Capital. (ASIC Policy Statement 146 Document, 2001:46-50). Continuing Professional Development as specified in policy statement PS146.70 (required since 1st January 1995) should require finance professionals to regularly attend workshops, conferences, or courses in the human capital field (ASIC Policy Statement 146 Document, 2001, 23).
- The Australian Securities and Investment Commission should set in motion a discussion paper which seeks to address the notion that brokerage firms and investment managers consider buying in the human capital competencies and skills from the external labour market. This would complement any equity research team. Financial markets would benefit from human capital analysts, working alongside quantitative financial analysts, at both the broker and fund manager levels, to provide independent research on those relevant human capital practices which are likely to influence future shareholder wealth. Such a discussion paper could also seek to address the concept of brokerage and investment management firms buying independent human capital qualitative complementary research products from independent research services firms. Regulations may be needed to require large investment banks to fund independent research for investors in this area if there is to be an increased level of transparency of investment recommendations and decisions. In the USA such regulations exist with respect to independent equity research houses. (*The Economist*, 14 December 2002: 67).
- In addition, as noted above, recent media coverage has highlighted the perception of conflicts of interest among analysts in investment banks and advisors on corporate finance. An increased emphasis on human capital analysis will increase the quality of information available to institutional investors and will help them to differentiate the quality of investment banking products and services. *The Economist* (13 April 2002: 70), has noted the relevance to this debate of the gul-

libility of investors. Higher quality information on human capital will give investors more substantial criteria on which to base their investment decisions.

- To integrate the analysis of human capital into the investment process, companies will need to provide access to securities analysts on human resource management practices so they have valid data on which to base their human capital recommendations. This is likely to change the type of relationship typically existing between analyst and company management. Increasing the level of access to companies will also require further directives by the Australian Securities and Investment Commission.

From a theoretical perspective, human capital analysis needs to be carefully applied. Theorists such as Delery (1998) emphasize the importance of understanding the mediating variables between strategic human resource management and performance (Harris and Ogbonna, 2001). Researchers need to be careful in attempting to define underlying mechanisms through which human resource systems affect financial performance. He notes that some human resource practices are additive (independent, non overlapping effects on outcomes), some are interactive (depend on other elements in the system) and some may be substitutes for one another. Given this complexity in analysis, securities analysts and investment managers need to be either comprehensively trained in qualitative techniques or purchase the analysis from relevant experts.

Concluding Remarks: How Urgent are these Changes?

In addition to the need for independence and objectivity and the serious nature of the credibility of sell-side securities analysts and their research products, there is compelling research evidence by Bassi, Lev, Low, McMurrer, and Sissfield (2001) which suggests that non-financial insights make up a large proportion of investment decisions. In their survey of 275 active US institutional investors on their basis for investment, approximately 35 per cent of investment decisions were reported as based on non-financial data, of which over half is related to human resource issues. Other non-financial data includes marketing, strategy and quality. Over 60 per cent of respondents indicate that between 20-50 per cent of decisions are non financial. Bassi, et. al. (2001: 348) notes that, although 'the quality of the business plan or strategy is important, investors ultimately place more weight on the ability of the management team to deliver. The focus is on action.' Therefore, securities analysts need to distinguish and to report on the difference between rhetoric and reality in companies. This is

not possible using traditional mathematical analytical techniques alone.

At the same time, Bassi et al (2001) make the obvious point that providing unique insights is the key to long-term, profitable success for a securities analyst. So, the imperative to understand the 'information on the human capital function that helps them assess rate of return on investment in human resources and predict future performance' is a critical factor for success for themselves as individual professionals and for the credibility of the industry as a whole. This fundamental point is essential to understand the argument for securities analysts using the most valid and rigorous research techniques. Specifically, for both securities analysts, their fund manager clients and the industry as a whole 'there is obviously money to be made from anything that helps them predict the future better' (Bassi, et al, 2001: 368). This is true as long as the insights are made available to the investing public and are rigorous and transparent.

The trend to increased disclosure of intangible drivers of value in the post-Enron environment will increase pressures on firms to understand and to disclose these drivers. The concomitant pressure on the financial markets to report on these intangible drivers is equally likely to increase. This is not to say that major re-regulation is required, but more a harnessing of the strength of the existing equity culture by complementing it with valid human capital analysis.

This paper began by posing a key question: 'Can securities analysts, their clients, and their industry benefit from systematically embedding qualitative human capital analysis alongside quantitative financial analysis for the purpose of making more transparent investment recommendations?' The research conducted by Royal and Althausser (2002), Royal (2000), Royal (2001), Dunphy and Griffiths (1998), Dunphy (2000), Collins and Porras (1994), Kalleberg et al. (1996), Collins (2001), Bassi, Lev, Low, McMurrer, and Sissfield (2001), Dunphy and Stace (2001) and Turner and Crawford (1998) and others noted in this paper, all combine to answer this key question in the affirmative. Central to this is the need for the Australian Securities and Investment Commission to articulate specific knowledge based requirements in human capital through its regulatory licensing process.

Contrary to the traditional wisdom, the nominal function of security analysts and investment managers is to form investment recommendations or investment decisions about the buying and selling of publicly listed businesses. The research evidence outlined in this paper indicates that their roles involve more than an assessment of a company's current and prospective financial condition, using only financial data, financial modelling techniques and other financial related research tools. The research evidence outlined in this paper indicates that human capital

analysis is essential to the work of securities analyst, investment managers, their clients and their industry, as a lead indicator of future financial performance. Additional knowledge specific competencies in human capital need to be acquired and incorporated by both securities analysts and investment managers in order that these professionals meet the fundamental activities which characterise their jobs.

Qualitative human capital analytical tools and techniques, as opposed to financial techniques, are becoming increasingly important particularly given that human capital related insights make up a large proportion of investment decisions (Bassi et al, 2001). Qualitative human capital analysis can illuminate the working of an organisation in a way that primary data on its own cannot achieve. When assessing which organisations are sustainable, truly transparent stock recommendations require both qualitative human capital analysis and traditional, quantitative financial analysis. The sustainable human capital model outlined in this paper goes some way to meeting this need.

In essence, this paper indicated that security analysts and investment managers currently lack the requisite skills necessary to underpin the investment recommendations and decisions in the human capital area (Royal, 2001). The regulatory agency, the Australian Securities and Investment Commission has a crucial role to play in increasing the knowledge competencies level to include human capital in the regulatory licensing process (ASIC Policy Statements: 146 and 164).

Failure to act upon this as a minimum will lead to a continuation of investment recommendations and decisions made by security analysts and investment managers who are underqualified to carry out important tasks and functions that make up a large component of their jobs.

Just as important in the current context, failure by the regulator to act will hinder the ability of these finance professionals to make available to the investing public more rigorous and transparent investment recommendations. In light of the increasing compulsory retirement savings accumulation funds, significant both in Australia and internationally in the post-Enron environment, the question remains is whether society can afford to take that risk.

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