

The Practice of Human Resource Disclosures

- *Some Evidence from Information, Providers and Users*

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Abstract: This paper is concerned with the relationship between information, providers and users of human resources disclosure in advanced annual reporting practice. Opposing prior disclosure research the focus of this study is not plainly limited to the pure amount of disclosure about human resource information made in corporate annual reports. The centre of attention is also to analyse and compare users' perception of voluntarily disclosed information on human resources with providers' intentions of making human resource information publicly available. Thus, it is aimed to establish a picture about human resource disclosures in annual reporting practice. Until now, there is no study available offering a multifaceted illustration on human resource disclosure. A comprehensive review of previous disclosure literature showed that information, providers and users have been studied separately. This study combines different aspects of prior research by applying a tripartite model studying information, providers and users together. The primary purpose of this research is the attempt to expand empirical knowledge about human resource disclosure practice by applying a new approach to existing research. The results from this study contribute to better understanding, possibly reducing deficiencies between providers and users of voluntarily human resources disclosures.

Introduction

Since the early 1990s, one could easily observe that many companies in various branches are facing a shift towards where information, expertise, skills, and technology is of great importance. Zuboff (1988) calls it *Information Revolution* but today's period has many names such as *Information Economy* (Shapiro and Varian, 1998), *New Economy* (Kelly, 1998), *Knowledge-based Economy* (OECD, 1996) or *Knowledge Society* (Drucker, 1993), which are synonymous for different market prerequisites than those traditional industries dealt with decades ago.

In order to cope with increased globalisation and sharper competition, some companies promoted and implemented new concepts and theories to measure intangible assets inside their organisation, such as human resource or organisational structure (Klein, 1997). A number of practitioners and researchers started to emphasise that for

some companies the value of their intangible assets often exceeded their tangible assets, although it does not show up in their financial statements. Many authors frequently articulated that the market value of knowledge-based companies could be 10 to 100 times its book value (e.g. Roos et al., 1998; Stewart, 1997; Edvinsson and Malone, 1997; Sveiby, 1997; Brooking, 1996). The fact that the market-to-book¹ gap was growing strongly in the early 1990s² let many researchers jump to the conclusion that traditional accounting standards are in need for new standards capitalising intangible assets and overcoming the gap between the book value and the market value. Studies on shareholder's use of corporate annual reports revealed that the usefulness of financial statement reports of publicly listed companies had declined (Epstein and Pava, 1993). The loss of relevance of financial reports was observed and interpreted as an indicator of the need and necessity for new accounting methods, e.g. Lev (1997). A study by Francis and Schipper (1999) provided general evidence to the popular claim that financial accounting information has become less value relevant over the period from 1952 to 1994.

The term intellectual capital became a very popular buzzword among knowledge-based companies as well as accounting practitioners, which were headed by Leif Edvinsson. Intellectual capital was promoted as the new method that would fill the gap of the market-to-book ratio. In other words it was claimed that the difference between market value and book value of a company is intellectual capital. The concept of intellectual capital aims to complete financial ratios with non-financial ratios, like Kaplan and Norton's (1992) Balanced Scorecard, and makes classifications into structural capital and human capital. The latter elaborates on the value of the intangible assets that are embedded in the company's human resources, the employees and managers. Stewart (1997; p. 106) stressed the importance of human capital for companies by labelling it the most important asset, as companies could not exist without human resources. It was noticeable that some companies were eager to develop formats to leverage their human capital. A small number of companies who had made serious attempts on reporting intellectual capital showed great interest in communicating to the investors' community how they attempt to capture and to develop their human resources, since they started to articulate their disclosure strategy about non-financial information in their corporate annual reports.

However, critiques to the application of intellectual capital are many and easy to identify, which might be one reason that not every company worked with this concept (Rimmel, 2001). Edvinsson and Malone's (1997) frequently quoted intellectual capital equation $IC = MV - BV$ has been in the centre for critics. This equation assumes that Intellectual Capital (IC) fills out the gap between Market Value (MV) and Book Value (BV). In a recent article Bukh, Larsen and Mouritsen (2001) examined that from an accounting perspective this equation turns out to be an illogical one, as it would imply to accept the intellectual capital equation as a function of accounting rules to construct the book value.

¹ Edvinsson and Malone (1997) acknowledged in their book on intellectual capital, that the research of James Tobin led to the development of the "Tobin's q", a variable that equals market value and book value and that this variable is in their view a strong argument in favour of reporting intellectual capital.

² Now, in the state of writing this paper, it is observable that since the beginning of year 2000 the market-to-book ratio has gone down for many companies. Therefore, not all but some of the applied arguments favouring accounting for intangible assets are already negated.

The repeated critiques might be a possible explanation why the interest in intellectual capital reporting faded away. Even the front-running companies seem to have abandoned to externalise information on intellectual capital, as the term intellectual capital is no longer to be found in their corporate annual reports.

However, independent of whether if a company has a clearly articulated disclosure strategy for human resources it is common practice that some pages in corporate annual reports are especially devoted to present the company's human resources. In that sense it appears that there is no real difference in the voluntary disclosure about human resources detectable, compared to the years when much was written about intellectual capital.

Literature Review and Research Issues

Previous disclosure studies point out the relevance of investigating the practice of human resource disclosure in corporate annual reports. Several studies have addressed the impact of various corporate characteristics on annual report disclosures. These characteristics include size, listing status, leverage, profitability, industry, type of the equity market, degree of economic development, activity on the equity market, culture and disclosure strategy. Gibbins, Richardson and Waterhouse (1990) argue that companies develop disclosure strategies in response to both internal and external conditions. Disclosure decisions are thus likely to be motivated by a variety of factors, such as asymmetric information and agency costs (Lev, 1992; Leftwich et al., 1981) information production costs and dissemination costs (Lang and Lundholm, 1993) or capital market pressures (Gray et al., 1995).

Empirical research on the determinants of corporate disclosure based on capital markets indicate that size and listing status are significantly associated with the level of disclosure (e.g. Adrem, 1999; Giner Inchausti, 1997; Cooke, 1989a,b; Singhvi and Desai, 1971; Buzby, 1975). The findings from these studies, however, have been rather mixed. Cooke (1989b) concluded that while size, as measured by total assets, sales and number of shareholders, is an important variable, it does not matter which of the three measures of size is selected. Singhvi and Desai (1971) provide evidence of an association between profitability and level of disclosure, which are opposed by Giner Inchausti's (1997) results that do not support such an association.

In a study of 20 years of accounting research Lev (1989) proposed a broad research agenda for capital market research on the relevance and usefulness of information. Only limited evidence is currently available about the intentions and purposes of those who produce corporate annual reports distributing them to the investors' community. This confirms that further research would lead to enhance understanding between both parts (Parker et al., 1989). Cooke (1989a) pointed out that disclosure research should analyse the form and understandability of information, as users' perceptions not necessarily have to match the providers' intentions with issued information.

Taking on the just loosely introduced problem the overall research question of this paper can be expressed as follows:

What is the relationship between information, providers and users of human resources disclosure in advanced annual reporting practice?

This research is concerned with the practice of human resource disclosure in advanced annual reporting. The focus, however, is not plainly limited to the amount of disclosure about human resource information made in corporate annual reports. The centre of

attention is also to analyse and compare the users' perception of voluntarily disclosed information on human resources with information providers' intentions of making human resource information publicly available.

This leads to the development of a subset of three questions that are addressed in this paper to find out more about the relationship between information, providers and users. The first question's intention is to analyse the amount voluntary disclosure between a company with a stated voluntary disclosure strategy compared to a company that has not uttered to have a strategy for voluntary disclosure. It has not been focused only on the voluntary disclosures of human resource alone but as well on a multitude of other voluntary disclosures. Hence, the first sub-question for this research can be expressed as follows:

1. *How does voluntary disclosure differ between companies with/without uttered disclosure strategy?*

The pure amount of voluntary disclosures gives an idea about their size and development throughout the years, since this paper examined the corporate annual reports of both companies for a five-year-period. However, this initiates the second research question of the subset, as the first sub-question does not reveal anything about the intention with the disclosed item. Thus, the second research question of the subset is elaborating on the intentions providers have when issuing human resource disclosures. The second research question is formulated as such:

2. *What are the intentions of information providers towards the voluntary disclosure about human resources?*

The third research question of the subset is drawing on the relationship between the voluntarily provided information about human resources and the users. As it is assumed that the provider of information has certain intentions with the voluntary disclosure this study will show how the users utilize information about human resources. Consequently, the final sub-question is addressed as in the following:

3. *How is voluntary information about human resources used by users from the capital market?*

This research is important for a number of reasons. For the most, as until now, there is no disclosure study available that shows the different aspects of human resource information. The results from this study may contribute to a better understanding between the providers and users of voluntarily disclosed information about human resources. Knowledge about differences may assist to reduce possible deficiencies between both companies as well as between the provider and user of disclosed information.

The primary purpose of this research is thus to attempt to expand the empirical knowledge of human resource disclosure practice by applying a new approach to the existing research. Relating to the above stated research question, the resulting research aim can be formulated as follows:

- Derive a picture of the intentions and use of the disclosure about human resources in advanced annual reporting practice.*

Naturally, the purpose of this paper is strongly interrelated with the research questions, which should help to illustrate the relationship between provider, user and the information *per se* to generate empirical evidence about the state of practice of

voluntary disclosures about human resource. This is in particular of interest, as it will engender facts about the similarities and differences between the amount of disclosure, the providers intentions with the released information and what the users actually are thinking of voluntarily disclosed information about human resources.

Research Approach

Disclosures of human resource in corporate annual reports have been identified as the companies' need to provide information externally to investors in order to attract capital (Frederiksen and Westphalen, 1998; p.287). Over forty years, a large amount of research on various and different aspects of disclosure has accumulated. The nature and extent of disclosure research engaged analysing the user³ of disclosed information, the assessment of user needs, the amount of disclosure positions in different media applied for communicating information, as well as the market's reactions on special disclosure.

The largest amount of studies conducted in recent years, concerned with disclosure research, is taking a *user approach*⁴. Very few authors carried out disclosure studies taking a *company approach*⁵. Both approaches have in common that they only take a single perspective without examining the other parts involved. Despite the interesting nature of these studies no present disclosure research is available that has taken a broader view where users, providers and the information itself are analysed together as the whole.

The *tripartite approach* accentuates that the whole is greater than the sum of its part (Parker et al., 1989). This study is not only considering the user's perception and demands of information, but also the provider's intentions with information as well as the amount of information voluntarily disclosed in the main vehicle of communication. Truly, it is not pure curiosity that drives this study's intention to enter new grounds in disclosure research through the adaptation of a more holistic approach, rather than the effort to gain a deeper understanding on the practice of human resource disclosure in corporate annual reports.

The study's tripartite approach is inspired by Parker, Ferris and Otley's (1989; pp. 111-115) model of accounting's communication process between two parts, i.e. providers and users, but highlighting information as an additional third part. In order to derive a better understanding of human resources disclosure in annual reporting practice the users, providers and information are first studied partially. So far it is not very much different to what previous studies have done. Consequently, the questions in this study are comparable to those of numerous research studies conducted in the past that have investigated the use or disclosure of information. Questions such as *who uses what*,

³ Parker, Ferris and Otley (1989) discussed the difference between recipient and user. For them the term *user* presumes that a corporate annual report is not only read but also used for decision-making. This presumption is in their view not valid for a *recipient*, as they not necessarily have to apply corporate annual reports for decision-making. This paper applies the first definition.

⁴ The term user approach is here characterised by research about users or potential users behaviour, reactions and demands of accounting information. An example of a user approach is Epstein and Pava's (1993) study on shareholder's use of corporate annual reports where they investigated what information shareholders use in making their investment decisions and what additional information they regard as being useful.

⁵ The term company approach should pinpoint that researchers who apply such an approach are concerned with research out of a company's perspective elaborating on problems that are of interest or affect companies issuing of information. One good example of such a company approach is Craighead and Hartwick's (1998) study on the effect of CEO's disclosure beliefs on the volume of disclosure about corporate earnings and strategy, investigating the association between managerial disclosure beliefs and firms' disclosure activities.

what do they use, what is the amount that is provided, why is it provided, how do they use them, why do they use them and with what effect do users use information have been asked repeatedly but only taken a partial perspective.

Nonetheless, the insight gained from these partial studies are necessary for the tripartite model to generate a picture of the human resource disclosure practice. This picture will be established by data source triangulation⁶ analysing the similarities and differences between the providers' intentions with human resource disclosure, the actual amount of provided information, users information needs and their utilisation of human resource disclosures.

Parker, Ferris and Otely (1989) examined that there is a communication gap existent between the users and provider of information in corporate annual reports. The available evidence reveal that while the providers of information recognise the importance of sophisticated users and communicate their information via the annual report to this user group in particular, the communication still may be not sufficient. The providers may have correctly identified the target group of corporate annual report users, but the communication of their information may not be entirely effective (ibid.).

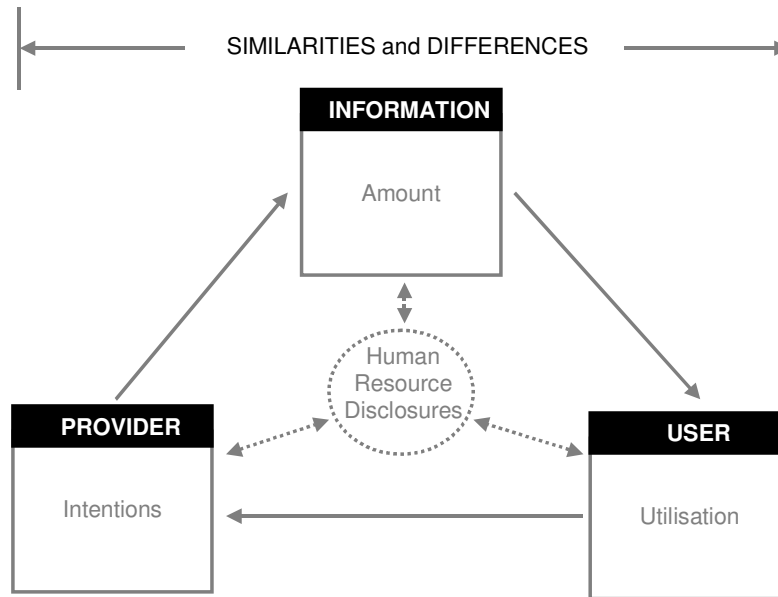


Figure 1 Tripartite model of human resource disclosure practice

The tripartite model in Figure 1 is basically representing the three studies conducted for this study, as illustrated by the boxes *provider*, *information* and *user*. The arrows between the boxes illustrate the interchanging of information, whereas the box *information* represents the collection of information in the corporate annual report. In Figure 1 the companies are the provider of information, which disclose information by developing an idea, considering its destination, purpose and likely impact. Hence, this should represent that all information a company externalise is due to reflected action. The provider transmits the disclosure information and its message via a chosen medium, which for this study is the corporate annual report, to the user who receives it. The

⁶ According to Hammersley and Atkinson (1995, p. 183) data source triangulation involves comparison of different data relating to the same phenomenon.

users, in this study the financial analysts, who receive the disclosed information may translate it into a format that is most appropriate for their understanding.

If the user sees a need to respond to the received disclosed information in the form of feedback a similar process will be initiated. The user will construct the responding information by developing an idea and considering its destination, purpose and likely impact. For that reason is responding to the received information a conscious action by the user. The users' feedback to the provider can contain everything from questions to answers, which the provider may regard in the next disclosure of information.

Nonetheless, the circle *human resource disclosures* with arrows from and to all three parts should illustrate that the centre of attention in this research is on human resource disclosures, which is the reason why the circle, as well as the arrows, is shown as dotted lines.

The model as described above exemplifies how this study aims to generate a picture of voluntarily disclosed information about human resources in annual reporting practice. The tripartite approach sets off with a study examining the general amount of voluntary disclosure in corporate annual reports, which includes human resource disclosures. This was followed by studying the intentions that providers have with their disclosed information. The third study elaborated on the users' perception and use of disclosed information.

The picture about the reporting practice of human resource disclosures is completed in the final section by analysing the three studies empirical findings through data source triangulation towards similarities and differences. The triangulation concentrated on similarities and differences with human resource disclosures in advanced annual reporting examining the perceptions, beliefs, interest, motives, attitudes and values of both users and providers. Each part in the tripartite model, as outlined in Figure 1, is of interest and played an important role for the design of the three studies in order to trace similarities and differences regarding voluntary disclosure of human resource information. This study brings evidence not only about if disclosure about human resources is useful and how effective the communication between provider and user of disclosure information is, but furthermore shows human resources disclosures in annual reporting practice.

Research Methodology and Study Design

In order to facilitate the gathering of the empirical material of this study there were many alternative methodological⁷ strategies to choose from. Each methodology strategy has its advantages, disadvantages and tradeoffs.

The overall approach of this study is a combination of qualitative and quantitative research. The application of both qualitative and quantitative methods is not conflicting in itself. Glaser and Strauss (1967) reasoned that both forms of data is useful and can supplement another to increase understanding of the studied. However, the purpose here is not to pigeonhole the present study into a certain research approach but rather to bring forward its most important features. The distinctiveness of qualitative research has certain implications for the write-up, as qualitative research designs are typically not intended to prove hypotheses or test a certain theory (Parker and Roffey, 1997). This

⁷ According to David Silverman (1997, p.1) the term methodology implies a general approach to studying research topics, whereas the meaning of method is a specific research technique. This study follows this line of argumentation, as different specific research techniques are necessary to apply in order to facilitate research.

does not allow the researcher to ignore theoretical perspectives of previous work cited in the literature review, but it permits the researcher to develop concepts to understand patterns in the data.

The decision to conduct a comparative study was at hand, as it was not very difficult to recognise that not every company showed interest in reporting non-financial values. Starting to examine SCANSECURE⁸ regarding its business environment the insurance industry showed very different corporation types. These differences are not meant to be understood as variations based on variables like size or multinationality alone. Media applied different expressions describing corporation's business behaviour. Journalists of articles in general magazines, business press or TV, reports often describe corporations using terms like progressive or conservative.

SCANSECURE was often mentioned in media to be a progressive corporation, which may also be related to their successful business during the mid-1990s, that shows proactive information behaviour. The search for a corporation to be compared with was not very difficult. ASSURANCE proved to be very appropriate to serve as a counterpart case. Media often mentioning that ASSURANCE had the reputation to be a conservative corporation coincided by traditional business behaviour.

The focus for the user study is on financial analysts, as it serves two practical functions. One is that analysts are identifiable as a group and the other is that they are regarded as financial intermediaries serving advisory functions (Beaver, 1998). An important and decisive factor for a successful user study was the comparability criterion, which demanded intensive knowledge of both corporations. To see whether analysts were covering both corporations, or not, a list of analysts covering ASSURANCE was used to crosscheck this criterion. The original list of analysts covering SCANSECURE consisted of 21 analysts working for 17 different financial analysts firms and brokerage houses in three different countries. The crosschecking with the ASSURANCE list resulted in 18 analysts working for 15 different financial analysts firms or brokerage houses that were covering both corporations (see Figure 2).

TYPE OF STUDY		SAMPLE CHARACTERISTICS
Provider Study	<ul style="list-style-type: none"> • 3 interviewees selected in total • 2 in Stockholm • 1 in Munich 	Codes C1 – C3
Report Study	<ul style="list-style-type: none"> • SCANSECURE's annual reports from 1996 - 2000 • ASSURANCE's annual reports from 1996 - 2000 	
User Study	<ul style="list-style-type: none"> • 18 interviewees selected • 14 brokerage houses and analysts firms included • All interviewees are sell-side analysts • 11 in London, 4 in Stockholm, and 2 in Düsseldorf 	A1 – A18

PARTICIPATING COMPANIES		
• ASSURANCE	• Danske Securities	• JP Morgan
• BNP-Paribas	• Commerzbank Securies	• Merrill Lynch
• Carnegie	• Dresdner Kleinwort Benson	• Morgan Stanley Dean Witter
• Chevreux Nordic	• Goldman Sachs	• SCANSECURE
• Enskilda Securites	• HSBC Investment Bank	• Schroder Salomon Smith Barney
		• West LB - Panmure

Fig. 2 Sample characteristics and participating companies

⁸ SCANSECURE and ASSURANCE wish to remain anonymous until the public defence in the author's final PhD-seminar.

Due to the fact that 3 analysts and 2 analysts-firms were marked unclear, an initial check on every brokerage houses and financial analysts firms that were included in the lists was done by contacting them. Finally, it resulted into a possible population of maximum 21 interviewees from maximum 17 brokerage houses and financial analysts firms. Only three analysts were not willing to be interviewed, which reduced the final participant list for the user study to 18 interviewees from 14 brokerage houses and financial analysts firms. Therefore, the response rate of this expert sample is 85.7 % (18/21) for the analysts and 82.3 % (14/17) for the represented brokerage houses and analysts firms.

The somewhat holistic nature of this research suggested not only to interview provider and user of voluntary disclosed information but also to examine the actual amount of voluntary disclosed information in corporate annual reports. The annual report represents the collection of corporate information that has been issued during the year (Adrem, 1999).

This collection of corporate information is prepared by the board of directors and consists of an administration report, balance sheet, income statement, statement of changes in financial position and notes to the financial statements (Cooke, 1989a, 1989b). Specifically, the administration report must contain information on employees and in fact on all significant events that have occurred during the year or after the financial year.

The review of prior research has shown that a disclosure scoreboard is a useful research instrument for measuring the extent of voluntary disclosure. The disclosure scoreboard developed for this paper is based on a disclosure checklist used by Adrem (1999), which is primarily influenced by the IAS recommendations on financial reporting published by the IASC, and the disclosure checklist used by Meek, Roberts and Gray (1995). The examination of previous studies applying a disclosure scoreboard brought to light that the vast majority analysed just a single report year. Very seldom research in this area considered the examination of a longer period. The report study in this paper regards the analysis of a five-year-period of time as a useful means to obtain valuable insight about the development of voluntary disclosure items over time.

The disclosure checklist development for the report study started with 224 potential voluntary disclosure items from Cooke's (1989a) disclosure checklist, which due to accounting harmonisation from the EU directives was reduced by 25 disclosure items. The remaining items were then compared with the checklists from Adrem (1999) and Meek, Roberts and Gray (1995). Finally, the compilation of voluntary disclosure items was compared with the disclosure checklist from PricewaterhouseCoopers (2000), recognising the IAS requirements for the year 2000, and reduced the voluntary disclosure checklist for the report study to 151 voluntary disclosure items.

Some human resource disclosure items were not found in earlier disclosure studies but have been discussed in the literature. Edvinsson and Malone (1997) outlined a very detailed list on human focus indices, from which 6 additional disclosure items were derived, as number of full-time or permanent employees, number of part-time or temporary employees, average years of service with the corporation, average age of employees, time in training and IT-equipment for work support. Flamholtz (1999) discussed senior managements importance for corporations, which generated 5 additional disclosure items about human resources. These five additional disclosure items are Identification of senior management and their functions, amount of senior managers, senior managements distribution by gender, senior managements average

years of service within the corporation and senior managements average age. Tyson (1995) examined companies' motivation of management expenses and the willingness to spend money to recruit management. This generated the disclosure item management expense and acquisition costs for the report study's disclosure checklist.

The analysis of the disclosure scoreboard (see Appendix A) for the report study is additive and unweighted following the path of the studies conducted by Adrem (1999), Meek, Roberts and Gray (1995) and Cooke (1989a). All three studies referred to Spero's (1979) empirical findings that the weighting of information is not relevant for the amount of disclosure. Either a company disclose a voluntary item or did not disclose the information, which led to that the amount of disclosure is measured by the number of sentences. No ranking list for the importance of different items is applied nor is the number of words about an item used. This procedure is corroborated by the criticisms discussed in the study by Hackston and Milne (1996). For both corporations and each year, a voluntary disclosure index is computed as the sum of the actual score achieved and not as a percentage of the total score, since the categories do differ in the number of items and are likely to be misinterpreted.

The analysis of the empirical data from the user study was carried out according to grounded theory means. In grounded theory coding is a very vital part as it generates categories. The initial coding should be made as without predefinitions, which is referred to as open coding (Strauss and Corbin, 1990). Open coding aims to generate central categories from the empirical data, which should be carried out without any predefinitions, to get consciousness about the structure in the empirical data. Therefore, it is important that the categories are named with terms that the interviewees have used. The stage after the open coding is selective coding, which means that more systematic coding of the empirical analysis is selecting the preliminary categories in order to deduct the amount of generated categories to a more practical amount.

The empirical data of the provider study was collected from the semi-structured interviews (see Appendix B). Due to the fact that the interviews were conducted with three employees in total from both corporations it was decided to present the answers different to the user study. Generating categories, as done for the user study, and presenting them in tables as descriptive statistics was not considered being inappropriate per se but the presentation of the empirical material could emphasise on the priorities of the given answers by stating quotes from the interview accounts. This technique allows showing a considerable latitude of the empirical data, which in turn can be contribute to a deeper understanding on the studied phenomenon. Due to the fact that only three interviews were conducted in the provider study this technique was favoured instead of the presentation of generated categories in tables as done for the user study.

The picture of current human resource disclosure practice will be derived from a comparative analysis of the empirical analysis from the previous three studies. Glaser and Strauss (1967) discuss that a comparative analysis is a general method to illuminate evidence from the empirical material with findings from comparative groups. Practically, in the tripartite approach findings from e.g. the user study are compared with the empirical evidence from both the provider study and the report study. In that way similarities and differences between the intention, use and existence of information are analysed.

Context of the research

Although insurance corporations increasingly moved their business from their traditional national markets towards competition on international markets, worldwide there are only few similarities in the requirements by national insurance accounting frameworks. Currently, there is no international standard on insurance accounting to reduce the diversity of practices, which interfere with comparability and transparency in the reporting of the results of insurance corporations.

In April 1997 the Board of the International Accounting Standard Committee (IASC) added the Insurance Project on its agenda to fill an existing gap by developing an accounting standard particularly for insurance companies (IASC, 1999).

A comprehensive study (KPMG, 1999) identified that there are 132 options contained in EU's Insurance Accounts Directive of which almost all have been eliminated by at least one member state. That is one of the many reasons why the European Commission in 1995 officially stated to adopt a new strategy for accounting harmonisation (COM, 1995), which resulted in the European Commission's 2000 Communication (a policy document) stating its intention to require all EU companies, listed on stock markets, to prepare their consolidated financial statements using IAS (COM, 2000).

The ASSURANCE Group is the largest insurance group in Europe and one of the world's largest insurers in total premium income. The market capitalisation more than tripled from 1996's € 32.5 billions to 2000's € 98.0 billions. In the fiscal year 2000 the ASSURANCE Group increased the total premium income from 1999's € 60.6 billions by 8.1 € billions, to € 68.7 billions in 2000. In comparison with the total premium income of € 38.1 billions in 1996 the total premium income constantly increased during the five-year period by more than € 30 billions. The ASSURANCE Group developed from a mainly German focus, as it was in 1996, towards a global insurer with its main business in Europe. The growth of total premium income was also due to consolidations of the taken over insurers e.g. an in 1998 acquired French insurer was included for the first time in ASSURANCE's 1999 annual report with an effect of € 2.6 billions while the internal growth of the ASSURANCE Group increased with 5.3%, which amounted for € 2.4 billions of total premium income. Despite the globalised business the ASSURANCE Group still has overweight in non-life insurance business in its product line. In 1998 the established the ASSURANCE Group the ASSURANCE Asset Management being the responsible unit for organising ASSURANCE's global asset management operations. In mid of the year 2000 an company US-based asset management company PIMCO had been acquired to strengthen this business segment as well as to decrease ASSURANCE's underrepresentation in the USA.

The present-day SCANSECURE Group represents the aggregate of 48 Swedish insurance companies that were tied together after five Swedish insurance groups joined forces during the first half of the 1960s. After a restructuring program SCANSECURE transformed its business during the past decade into a leading global financial services and insurance group with a large franchise organisation. SCANSECURE has built the world's leading unit-linked life assurance franchise and its business model is among the great business success stories of the last decade. The largest product group are unit-linked plans, which are adapted to local legislation and market conditions. SCANSECURE's total sales illustrate that Swedish home market makes up only a relatively small portion of its business. The largest market for SCANSECURE is the US market where in 2000 almost 60 % of the total sales are generated. SCANSECURE's

second largest market is the UK, which accounted for around 29 % of total sales. Almost 80% of SCANSECURE's sales came from unit-linked products. The market capitalisation expanded almost eight times from 1996's € 2.43 billions to 2000's € 19.14 billions. Despite all growth in the savings business SCANSECURE migrated its traditional P&C business in 1999, joined by one Norwegian insurer and one Finnish insurer, establishing Scandinavia's largest P&C insurer.

Empirical findings from the Report Study

The empirical evidence obtained from the disclosure scoreboard (Appendix A) makes it possible to get a clear picture of both the amount of information voluntarily disclosed by SCANSECURE and ASSURANCE and the development of their levels of disclosure over a five-year period. In this paper only selected empirical results are discussed in detail, those who are explicitly dealing with human resources, whilst remaining categories are only illustrated on an aggregated level.

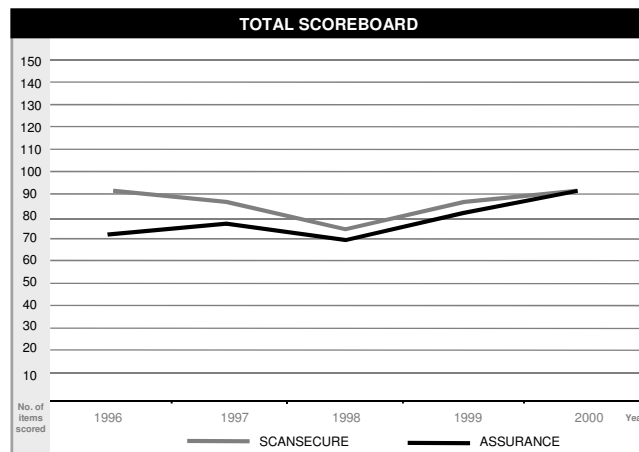


Fig. 3 Aggregated Results of the Total Scoreboard

Such is the presentation of all the evidence found in the total scoreboard (see Figure 3), which accumulates all scores of the three main groups giving a comprehensive picture about the development of the general amount of voluntary disclosure contained in annual reports of ASSURANCE and SCANSECURE. The maximum number of scores attainable for the total scoreboard amounts to a total of 151 items. SCANSECURE's annual report for the year 1996 achieved a combined score of 91 items, which was only be topped by SCANSECURE's highest score of 92 items for the year 2000. SCANSECURE scored on the aggregated results of the total scoreboard noticeably more for 1996 and 1997 compared to ASSURANCE's scores. For the year 1998 both corporations issued less information voluntarily whereas SCANSECURE's drop was larger than ASSURANCE's. Since then the gap was deteriorating until it disappeared for the year 2000, where SCANSECURE and ASSURANCE disclosed equally. This finding is interesting as it showed that whilst SCANSECURE had a higher score in the beginning ASSURANCE continuously improved and finally caught up with SCANSECURE, in terms on the amount of voluntary disclosed information that is.

The report study found that for the first main group on strategic information about the corporation ASSURANCE provided fewer items than SCANSECURE only for 1996. Whilst ASSURANCE showed a continuous increase in the amount of strategic

information SCANSECURE fell behind in its voluntary reporting. One of the main factors for this decrease for SCANSECURE was the evident decline of the voluntary information in the subcategory about the corporate strategy. Although SCANSECURE continuously increased the quantity of strategic information from the 1999 annual report on they were not only behind ASSURANCE but also laying below their own score of the 1996 annual report.

The result from the second main group on financial information about the corporation showed that SCANSECURE throughout the study revealed more financial information voluntarily compared to ASSURANCE. Despite the fact that SCANSECURE's amount remained constant during the first four years ASSURANCE's information behaviour were unstable. After that the number of items that ASSURANCE disclosed increased for 1997 this figure backed noticeably for 1998. The recovering and progressing increase of ASSURANCE's voluntary financial information for the years 1999 and 2000 was always below SCANSECURE's scores. Furthermore, the study found that ASSURANCE at its highest score never reached the lowest amount that SCANSECURE provided. One of the main differentiator was the subcategory measuring the amount of voluntary stock information where SCANSECURE always made more information available than ASSURANCE.

The third and final main group of the disclosure scoreboard, named nonfinancial information about the corporation is the product of the aggregated results of its three included subcategories: information about directors; employee information; social policy and environmental information. The maximum score attainable for the items included for voluntary disclosure on nonfinancial information about the corporation is 51 items in total. In the annual report of the year 1996 SCANSECURE gave voluntarily information on 28 items, which is 54.9% out of the maximum amount possible (see Figure 4).

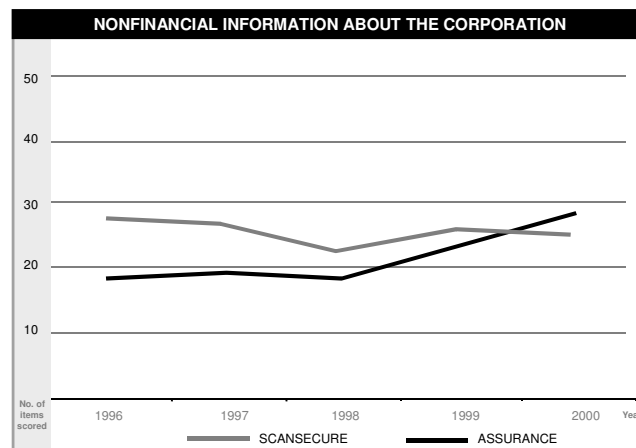


Fig. 4 Nonfinancial Information about the Corporation

In the following year SCANSECURE's 1997 annual report revealed a slightly decline scoring 27 items. For the reported year 1998 SCANSECURE's score deteriorated by 5 items to 22 items representing SCANSECURE's lowest score of nonfinancial information during the five-year analysis. The annual report that SCANSECURE prepared for 1999 showed an increase in scores by 4 items to 26 items, which however

was neither reaching the level of the 1996 nor 1997. SCANSECURE's 2000 annual report decreased a little by the score of one item to 25 items.

The annual report that ASSURANCE prepared for the year 1996 contained the voluntary nonfinancial information of 18 items, which improved by additionally 1 item scoring 19 items for 1997. For the reported year 1998 ASSURANCE's scores slightly decreased to the level they achieved for 1996. The 1999 annual report showed that the amount of ASSURANCE's nonfinancial information was improving by 5 items scoring 23 items. The increase continued in ASSURANCE's 2000 annual report by additionally disclosing another 5 items to the total amount of 28 items. The growth of the past two annual reports, of the years 1999 and 2000) resulted to the fact that ASSURANCE, for 2000, voluntarily disclosed more nonfinancial information about the corporation than SCANSECURE did.

The surprising result in this main group was not being indicated in literature and therefore was not expected. ASSURANCE distinctly improved their voluntary reporting of nonfinancial information. In the end the study found that ASSURANCE achieved a higher score than SCANSECURE. This is a rather astonishing result as management literature indicated that SCANSECURE was very active in providing nonfinancial information. However, the evidence of this study revealed that ASSURANCE was considerably improving its reporting of voluntary information on their employees whereas the study found that SCANSECURE had an opposite trend providing considerably fewer information than for 1996 and 1997.

Two subcategories from the main group nonfinancial information about the corporation are explicitly dealing with human resources. Consequently, they present detailed information about both corporations human resources.

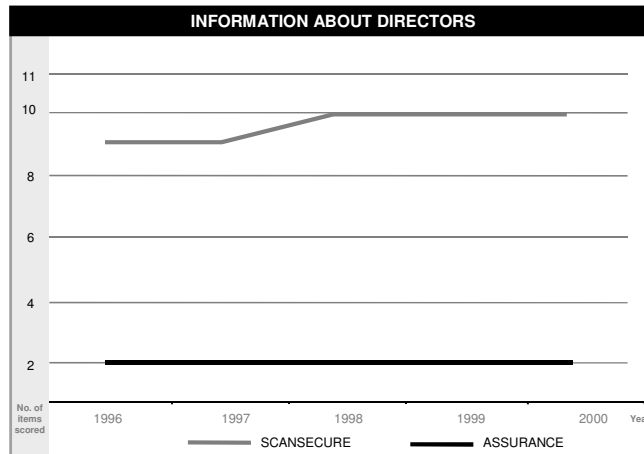


Fig. 5 Information about Directors

The subcategory information about directors evaluates the voluntary disclosed information about directors and consists of 11 items. As Figure 5 illustrates SCANSECURE's 1996 and 1997 annual reports contained 9 items. This quantity improved in SCANSECURE's 1998 annual report by one additionally disclosed item scoring 10 items, which remained the same for the rest of the investigated period. During the entire time span of the five-year analysis ASSURANCE's annual reports revealed little voluntary information about their directors as only 2 items were scored,

which are other directorships held by the executive board directors as well as the names of the directors in the top management.

SCANSECURE consistently disclosed items such as the age of the board members, their qualifications, the date of election to the board, or amount of shares held in the corporation. Since the 1998 annual report SCANSECURE also reported the commercial experience of the directors of the top management.

The subcategory about employee information is the largest in the group of nonfinancial information about the corporation taking account of a total of 27 items. In their 1996 annual report SCANSECURE disclosed information about their employees scoring 14 items, indicating a 55% achievement on the maximum score (see Figure 6). In the following reported year of 1997 this amount increased by 1 item totalling 15 items.

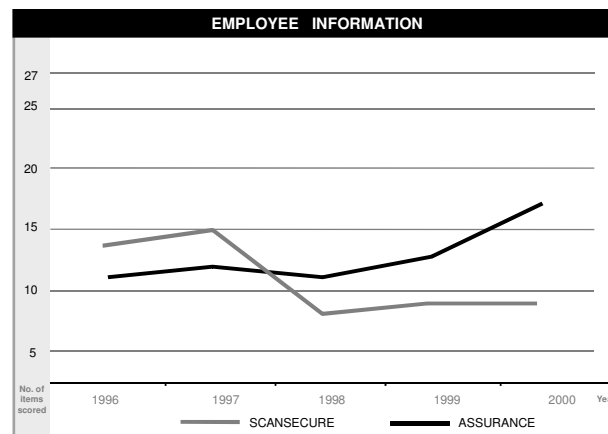


Fig. 6 Employee Information

SCANSECURE's 1998 annual report showed a deterioration of voluntary disclosed information as the score dropped down to 8 items. This value recovered in 1999 slightly for SCANSECURE amounting to 9 items. This level of disclosure remained the same for SCANSECURE's 2000 annual report.

For 1996 ASSURANCE's voluntarily disclosed information added up to a sum of 11 items. ASSURANCE's 1997 annual report contained a minor increase scoring 12 items, which strongly improved to a total score of 17 items for the year 2000. However, due to ASSURANCE's continuous increase SCANSECURE's leading position was overtaken mounting to a 8 items gap. This is attributable to many different items, as ASSURANCE slowly increased their reporting on items such as the number of employees for at least three years or time in training while SCANSECURE's reporting decreased these. SCANSECURE's annual reports for the years 1996 and 1997 provided information on items such as reasons for changes in employee numbers or categories; categories of trained employees, number of trained employees; or time in training. ASSURANCE almost constantly reported these items, except for time in training, which was stated rather infrequently. However, in the 2000 annual report ASSURANCE started to disclose items such as employees' distribution by line-of-business, number of part-time or temporary employees, the average years of service within the corporation, or the average age of employees. None of the analysed annual reports of neither ASSURANCE nor SCANSECURE made information on senior management available.

ASSURANCE gave in the 1996 and 1997 annual report information about their employees' gender distribution but not for the years to follow, whereas SCANSECURE constantly provided this information. Nevertheless, such occasional reporting was also detectable for SCANSECURE's information about the reasons for changes in employee numbers or categories as this information missed ever since the 1998 annual report.

Empirical findings from the Provider Study

This section descriptively presents a selection answers that the company respondents made during the interviews for the provider study, applying the interview guide as presented in Appendix B. For this study the heads of investor relations from both corporations have been interviewed. Analysts pointed them out during the interviews, which answers will be presented in the chapter to follow, to be the most appropriate persons to be interviewed for this study. This is basically due to the fact that the head of investor relations' functions as the corporations interface to the investor community answering their questions and passing information demands further to the corporational financial information group.

The answers of this study give evidence that both corporations are especially aware of the importance of disclosure on human resources. All respondents stated that human resources have for their corporations a very important position. Although the expressed importance of human resources to ASSURANCE the ASSURANCE participant clarified that they have not thought about how to value their employees in terms of putting them on the balance sheet or elsewhere in the financial statement. Further he stated that the disclosure information that ASSURANCE provides about its human resources has improved throughout the years but also that it is of more general nature. Both SCANSECURE interviewees remarked that it is important for SCANSECURE to have human resources included in their annual reports, as it is of great importance to the corporation internally. Referring to SCANSECURE's Navigator model's possibility to provide a holistic picture of the corporation it became important to SCANSECURE also to communicate developments in the human resources to the investors.

A sub-question was asking to deliberate on the corporations' strategy on human resource disclosure. ASSURANCE's participant accentuated that the management of human resources is very important for ASSURANCE speaking out that the employees are the motor of corporation. Therefore, ASSURANCE interviewee reasoned that it is important to have highly educated and trained staff since they sustain the corporation's competitiveness. ASSURANCE respondent assured that a written down strategy is also absent for human resource disclosure. He concludes that the disclosed information on human resources that are contained in ASSURANCE's annual reports currently seem to be sufficient, as investor did not asked for more information on human resources or other intangible assets. One of SCANSECURE's respondents expressed that the strategy for the communication of human resource information started off as an internal process where the numbers and figures of the Navigator model are aggregated to a corporate level, which then may be communicated outside the corporation. SCANSECURE's interviewees pointed to the fact that aggregation is not always desirable for any disclosed human resource information as relevance might be affected. Finally, he summarises that the basic strategy to voluntarily disclose information on human resources, as well as for other intangible assets externally, is that they have to be of value to increase transparency.

On the sub-question if investors use human resource disclosures in their valuations the ASSURANCE interviewee concluded that as long as no questions are asked by investors he would say that they do not use such information. He believes that is not very likely that analysts would take this information so serious to base their investment decision on it. SCANSECURE's interviewees reasoned completely different compared to ASSURANCE's interviewee. The empirical evidence provides insight that SCANSECURE's respondents consider all information, which may somehow contain information on intangible assets and human resources, as relevant as all the other information. They pointed out that every analyst is interested in additional information and will take notice of any provided information. Further, they concluded that if information is internally important to corporate managers, analyst have not a chance of totally ignoring the fact that SCANSECURE is handling human resources in a structured manner to increase the value of their employees. SCANSECURE's interviewees mentioned that they are aware of the fact that there is currently no valuation model in use that considers either human capital or intellectual capital. However, they stated that analysts do use this additional information on human resources as background information to analyse the corporation in this context.

The final sub-question in this section sought after the advantages or disadvantages that may arise for the corporation disclosing information on human resources. All participants remarked that human resource information should be treated as any other information. In general, to be advantageous human resource information should be correct, trustworthy, and it should fill the function to enhance transparency. The disadvantageous opposite would emerge if human resource information would be incorrect, therefore not to be trusted, thus eroding the trustworthiness of the entire company.

Empirical findings from the User Study

The last of the four main questions in this section examined whether the participating financial analysts have a different model to facilitate a valuation of ASSURANCE's or SCANSECURE's human resources. All respondents made a statement on this question, which contains three main categories as illustrated in Figure 7.

Categories	No	Not really different	Yes
No. Analysts	13	2	3

Fig. 7 Use of different model for valuating human resources disclosure

13 interviewees denied that they use different models for valuating human resources disclosure. Both respondents, who acknowledged in their statement that they do not have a really different model for the valuation of ASSURANCE's or SCANSECURE's human resources, explained that their valuation model is basically the same but that minor adjustments are made to derive individual estimates e.g. changes in size of distribution system. The general finding from this section's question is evidenced from a variety of studies from O'Shaughnessy (1998), Burgstrahler and Dichev (1997) or Barth and Landsman (1995) show that the majority of financial analysts do not use multiple valuation models or different partial analysis in order to keep up comparability with other company valuation.

Elaborating on the Pros and Cons of human resource disclosure the question was addressed whether ASSURANCE or SCANSECURE benefit from voluntarily

disclosing information about its human resources. Figure 8 illustrates the results from this question in five categories.

Categories	Yes	Probably	More beneficial for SCANSECURE	Probably not	No
No. Analysts	6	3	1	4	4

Fig. 8 Benefits from voluntary disclosure of human resource information.

A typical quote for the “yes” category:

Any disclosure is beneficial that is the philosophy within our company. So even if human resources many be fuzzy and subjective, it still gives you a hint if the company has staff problems or if the company have a highly motivated staff that could sell everything as gold.
(A8)

Comments that were collected in the “probably” category:

I think that this has a rather marginal significance for the stock market, to be honest. I think, that this has an importance in another association for valuation. We are looking on growth and other types of ratios, which maybe take good human resources into account. But I think that one has to see this apart from a direct valuation of a company. (A16)

Some respondents mentioned that human resource disclosure is probably not beneficial:

They are probably not, as I don't think it matters to anyone, because it is not a big issue. Because you have so many other issues that you are wrestling with. (A17)

This question generated interesting empirical evidence. While Figure 8 showed that the vast majority of the respondents do not consider human resource disclosure for valuation, the data from the question in this paragraph reveal that more than the half of the interviewees regards the disclosure of human resource information being beneficial or at least probably beneficial. This seems to indicate that voluntarily disclosed information has an effect on analysts' context building about corporations, which was also articulated in Ellis and Williams (1993) framework.

A more general question was addressed to the interviewees whether they can think of advantages that ASSURANCE or SCANSECURE might obtain from the voluntary disclosure about their corporations' human resources. There was no limitation to the number advantages but usually the interviewees mentioned one or two advantages. The analysts' answers are aggregated in Figure 9

Categories	Number of analysts
Increased transparency	4
Higher valuation	3
Good marketing to recruit good people	3
It is nice to have	2
Impression to employees that company cares	2
Increased trustworthiness	1
Less disclosure will be punished by the market	1
Showing customer focus	1
Pleased investors	1
No sustainable advantage	1
Neither advantages nor disadvantage	1
It does not matter	1

Fig. 9 Advantages of voluntary disclosure on human resources

The findings here show that analysts can think of a large array of advantages that could arise for companies who voluntarily disclose human resource information. Most often mentioned was that human resource disclosures could lead to increased transparency. One respondent underpinned this argument indirectly by a contrasting statement that the market would punish less disclosure. Another potential advantage of human resource disclosure was higher valuation as 3 respondents expressed that this kind of information might improve valuation. One of these 3 respondents explained the higher valuation due to increased trustworthiness. An additional 3 interviewees saw an advantage from human resource disclosure arising from a marketing standpoint. In their view human resource disclosure could be a marketing tool to attract good workers to join the corporation. Two financial analysts uttered that human resource information is nice to have but they also pointed out that human resource information is quite complex and not easy to quantify. This was outlined by Parker, Ferris and Otley (1989) as being one critique to human resource accounting that the measurement models are too complex to generate comprehensive and useful information.

Since all respondents made a statement about potential advantages it seemed to be a natural consequence to ask the participating financial analysts about disadvantages that ASSURANCE or SCANSECURE could get from voluntarily disclosing information about their corporations' human resources. As the previous question there were no limitations to mention one advantage only and some financial analysts pointed out more than one disadvantage. Every respondent made a statement on this question, which constitutes Figure 10.

Categories	Number of analysts
Too much disclosure	6
It is very biased	4
Not meant seriously	3
Dishonest with the market	3
Overaged staff	2
Organisation not functioning	2
Not as good as other companies	1
Deadweight to productive part	1
No disadvantage, if not over exaggerated	1
Neither disadvantages nor advantages	1

Fig. 10 Disadvantages of voluntary disclosure on human resources

The category that was mostly acknowledged was stating that too much disclosure is a likely disadvantage of human resource disclosures. Half of the respondents in this category named especially SCANSECURE's general disclosure strategy which in their believe issues too much information which is not of interest while some information is no longer available. One interviewee mentioned in particular that the human resource information in SCANSECURE's corporate annual reports is very little informative. Another point that was made by 4 respondents is that human resource information is very biased. Further 3 financial analysts uttered that disadvantages might occur if the human resource information is not meant seriously or dishonesty with the market. If it is possible that the human resource disclosure reveals that the corporations staff is overaged or that the organisation is not function might this turn out as a disadvantage.

An Analysis of the Assessment of Human Resource Disclosure

By analysing the similarities and differences between information, providers and users of human resource disclosure, as presented in Figure 1, a simplified holistic picture of human resource disclosure is aimed to be generated.

Since Hermanson's (1964) study about the measurement of the value of human assets a great deal of research has been conducted about many facets of human resource information, but not in the way as this research does. This paper provides evidence that the disclosure of human resource information is important and that human resources have for their corporations a very important position.

Early human resource accounting research (e.g. Heikiman and Jones, 1967; Flamholtz, 1971; Lev and Schwartz, 1971) tended towards putting human resource disclosures on the balance sheet or elsewhere in the financial statement. ASSURANCE's respondent elucidated clearly not having considered human resource disclosures in terms of measuring the economic value of employees performance like Fitz-enz's (2000) human resources performance measures. Although not externalising specific human resource measures, ASSURANCE's interviewee referred to that voluntary disclosure about human resources gained importance due to increasing amount of general information. This line of reasoning is strongly supported by the report study's empirical findings, which reveals that ASSURANCE's quantity of voluntarily disclosed human resource information strongly improved throughout the years.

The empirical evidence from the report study showed quite the opposite development for the voluntary disclosure about human resources in SCANSECURE's case. In the past three corporate annual reports from SCANSECURE the amount of human resource disclosures strongly decreased. This outcome somewhat surprised as it opposed the answers from the provider study were both SCANSECURE interviewees stressed the importance of providing human resource information in corporate annual reports because this subject is important internally within SCANSECURE's organisation. SCANSECURE's decreased scores in the report study, however, might be explained by a change in the information content's reporting in human resources in more general terms and no longer mentioning specific issues e.g. number of trained employees. The FASB's projected framework concluded that a corporation might lower the quality or quantity if the risk of competitive harm outweighs the expected benefit from voluntary disclosures (FASB, 2001; p. 15).

The corporations' strategies on disclosing human resource information are relatively different. Although the ASSURANCE's participant assured that a clearly formulated strategy is absent for human resource disclosures it was at the same time emphasised that employees are the key to sustainable competitiveness. According to Fitz-enz (2000) the latter is an indicator for corporations' changed understanding about human resources and their effects on corporational competitiveness. In the provider study the ASSURANCE strategy has been described as a close-to-the-market approach, which is signified by the fact that the quantity and quality of human resource disclosure is regarded as being sufficient until users indicate that they would like to have more specific information.

SCANSECURE's strategy for providing voluntary human resource information started off as an internal process. Through the development of SCANSECURE's Navigator model additional information about human resources was voluntarily externalised in the corporate annual reports. SCANSECURE's interviewees named the

general disclosure strategy as being proactive. The proactive disclosure strategy generally implies that information is voluntarily introduced to users before the market demands it. SCANSECURE's intention with a proactive disclosure strategy corroborates with FASB's (2001) insights into enhancing voluntary disclosures, the idea behind voluntarily disclosed human resources information is to increase transparency for the users, which in turn will lower the cost of capital. Consequently, the evidence from SCANSECURE's interviewees showed that voluntary disclosures about human resources make an impact on users, as it helps to constitute the overall picture about a corporation's business.

The findings from the user study seem to reflect the voluntary disclosure strategies of both corporations correctly on an overall level. The users acknowledged SCANSECURE as the corporation who is disclosing most information, recognising SCANSECURE as having adopted a proactive disclosure strategy. With a closer look to the disclosures about human resources this impression is not quite rooted in the empirical results from the report study. Therefore it might be hard to prove in what way a proactive disclosure strategy is more beneficial in financial terms than a reactive strategy, as Adrem (1999) concluded. According to Botosan (1997) it is difficult to quantify the exact impact of voluntary disclosure on users' decision-making process.

The findings from this research support the FASB Business Reporting Research Project's (FASB, 2001) results that there are many ways of how voluntary disclosures, including voluntary human resource disclosures, help to describe and explain investment potential to users. The provider study showed that both corporations assessed different disclosure strategies, but they generally served the users demand to improve their understanding about the corporations' background by examining additional information on human resources.

The providers of disclosures have to consider several dimensions that disclosed information would have than simply what information to disclose (Gibbins et al., 1990). Unlike mandatory disclosures, voluntary disclosures do not directly point out the beneficiaries or what kind of negative impact they might have. According to Lev (1992) voluntarily disclosed information has three receiver parties. One party is the investors' community, which might reduce their cost of search for information due to voluntary disclosure. A second party would be made up from people inside the corporation's organisation, as Hendriksen and VanBreda (1992) emphasised that employees do read corporate annual reports to get informed about the state of the corporation's development and policies. Last but not least, competitors would also receive voluntarily disclosed information. Consequently, what is valid for general voluntary disclosure do hold for the more specific information about human resources.

The user study revealed that there is a large array of positive effects that might originate from voluntary disclosure about human resources. The most often mentioned positive affect that users pointed out in the user study were that voluntarily disclosed information about human resources might lead to increased transparency. In an article Diamond and Verrecchia (1991) addressed that voluntary disclosures have the potential to reduce information asymmetry by reducing the information gap that exists between the provider and the user of disclosed information. This reduced information gap may then decrease the users' uncertainty about the corporation and lower the agency costs, which in turn might reduce the cost of capital by attracting investors. According to Lev (1992), however, there is no guarantee that the full value of voluntary disclosure will be obtained by users.

Although increased voluntary human resource disclosures might improve users' perception about transparency of corporations, providing voluntary disclosure is not fully unproblematic. Hendriksen (1982) has stated that the provider of voluntary information have to be aware that too much disclosure might be harmful, because unimportant information might bury significant business information for the users. In the users study too much disclosure was most often named, as a disadvantage that might occur if corporations do not carefully consider the amount and impact of voluntary disclosure. Therefore, corporations should be concerned not to create information overload for users when they disclose human resources, as it may create a negative impression for the users and could fall back on the corporation. Emphasis should lie on important facts enhancing the quality of voluntarily disclosed information in order to meet the expectations of all user groups.

The research by Kim (1993) indicates that users do have different expectations towards the amount of voluntary disclosure, as the better-informed user prefer less disclosure than the less well-informed user. This shows that for corporations it is important to find the right balance between too much and too little voluntary information about human resources. Corporations need judgment out of a cost-benefit perspective when they determine how much voluntary disclosure is appropriate and disclosures about human resources makes no exception to the rule. In her cost-benefit study of voluntary disclosure Depoers (2000) examined the trade-off between the incentive to withhold and incentives to disclose voluntary information and concluded that corporations have to consider their disclosure decision carefully. The interviewees of both corporations stated another aspect, as careful consideration will create trust in the corporation in the long run.

Regarding human resource disclosures the users came up with some possible disadvantages that might originate from too detailed human resource information in corporate annual reports. One example was given in the user study that very specific information about directors or employees might reveal that a corporation have an overaged board of directors or employee structure. Such information about human resources could diminish analysts' trust in the corporation's management or salesforce, as they might suspect that new products will not be sold at the cutting edge of the market. To reason like that would have negative effects on analysts' valuations.

At the same time while the possible disadvantages were just outlined users have as well referred to potential benefits that certain types and more specific details of voluntarily disclosed information about human resources might generate. Higher valuation and increased trustworthiness were mentioned in the user study as possible advantages that might occur due to increased human resource disclosure. There is interplay between trustworthiness and higher valuation (Carnaghan et al., 1996). Human resources disclosures might help to improve the credibility of a corporation for the users as they can gain deeper understanding that in turn probably contributes to reduce misallocation of capital.

In a nutshell, this section tried to shed light on the similarities and differences as well as the pros and cons that may arise for corporations when voluntarily disclosing human resource information. Two of the main issues outlined were elucidating human resource disclosures role towards cost of capital as well as the received credibility by users. Summing up it can be assumed that providers and users regard human resource disclosures if they are correct, trustworthy, and fill the function to enhance transparency. This would lead to increased trust and lower cost of capital. The contrary

would be that voluntarily disclosed human resource information might be considered disadvantageous. Eroded trustworthiness could fall back on the overall perception of the corporation causing increased cost of capital.

Conclusions

The research approach introduced in this study has important implications for understanding the often-disregarded nature of communication and interpretation of disclosed information between providers and users. It has been drawn attention to the tripartite approach, which aimed to generate a holistic picture by elaborating on the providers' intentions with, the amount of as well as the users' perceptions of voluntarily disclosed information on human resources. The introduction of the tripartite approach represents one of the main contributions of this study to existing disclosure research.

In contrast to many prior studies, this paper has given great attention to the practice of human resource disclosure. The theoretical framework of traditional disclosure research was expanded towards human resource accounting introducing a specific human resource disclosure focus, which opposes the usual orientation on the impact of disclosure of strategic and financial information on analysts' earnings forecasts (e.g. Lang and Lundholm, 2000; Bloomfield and Wilks, 2000; Craighead and Hartwick, 1998; Watts and Zimmerman, 1990; Leftwich et al., 1981). The objective with a human resource focus was neither to idealise nor to dismiss the disclosure of human resource information. Moreover it was the desire to achieve a better understanding of the disclosure about human resources in advanced annual reporting practice, as many contradictory views are existent among practitioners and academics, with a ranging magnitude from very important to irrelevant. This paper was always aware of the fact that human resource disclosures role is generally not the most important factor in the users decision-making process. However, the empirical evidence showed that even though users do not base their entire decision-making process upon the voluntary disclosure about human resources, this disclosure type is contributing to the users overall perception of the company and in that sense is this kind of information appreciated and important.

This study thereby supports and expands Adrem' s (1999) arguments on the importance of distinguishing between information types of voluntary disclosure to extend the level of analysis. The majority of previous disclosure studies have been limited to measure the total amount of voluntary disclosures in annual reports. Exception to the rule has been the studies from Gray, Meek and Roberts (1995b) and Meek, Roberts and Gray (1995), which indicated the importance of distinguishing between strategic, financial and non-financial information. The notion of distinguishing voluntary information has been taken further in this study in terms of expanding the non-financial disclosure index with human resource items that were of interest in current human resource literature (e.g. Becker et al., 2001; Phillips et al., 2001; Fitz-enz, 2000; Cascio, 1999). From this perspective, in fact, it is possible to illustrate more detailed differences and similarities in companies' attitudes towards voluntarily disclosed human resource information as well as changes in their reporting structure. Still, the disclosure scoreboard results cannot analyse why reporting procedures may have been revised or why the statement of goals and visions changed. Therefore, instead of being satisfied with the pure amount of voluntary disclosed human resource information attention is moved on to understand the reasons behind differences and similarities and their utilisation.

The methodological framework of this study intended to tie an empirical knot between the previously fragmented perspectives existing in disclosure research, i.e. focusing on the impact of disclosure information on users or on the usefulness of voluntary disclosure, by complementing a disclosure scoreboard with interviews of both providers and users. In that sense it is the combination of quantitative and qualitative methods that were applied in this paper for the empirical exploration of disclosure about human resources in advanced annual reporting practice.

The framework may also contribute to the more general debate on voluntarily disclosed information itself as well as the relevance, or irrelevance, of distinguishing between different types of voluntary disclosure. Authors like Meek, Gray and Roberts (1995) refer frequently to Cooke's (1989) study on disclosure of financial information, which not only extended the level of voluntary disclosures tremendously but also provided a conceptual framework of distinguishing between different types of voluntary disclosure. Throughout this study a refined focus on one specific type to obtain new insights about its practice has deliberately put up with the traditional broad view of voluntary disclosure. This standpoint is encouraged by Meek, Gray and Roberts (1995) statement, which criticised previous tendencies in disclosure research treating voluntary disclosure as being amorphous, suggesting a further refined focus for voluntary disclosure.

Insights from this study then may contribute to a developing view of voluntary disclosure, which Meek, Roberts and Gray (1995) proposed in their study, suggesting the consideration of the interested parties, the providers and the users, in order to understand why and in what way voluntarily disclosed information is prospectively useful for successfully competing on capital markets. Not to forget that another contribution of this research is to reflect on the findings, opposing one of Adrem's (1999) conclusions, that a company with a reactive disclosure strategy had the similar level of voluntary disclosure compared to a company that has a clearly formulated proactive disclosure strategy.

Appendix A

	Strategic Information about the Corporation
I.	General Corporate Information
1.	Introduction about the corporation
2.	Brief history of the corporation
3.	Organisational structure
4.	Financial summary
5.	General future information
II..	Corporate Strategy
6.	Statement of business vision
7.	Statement of business concept
8.	Comments on achievement of objectives - general
9.	Comments on achievements of general objectives
10.	Statement of strategy and objectives - financial
11.	Comments on achievements of financial objectives
12.	Statement of strategy and objectives - marketing
13.	Comments on achievement of marketing objectives
14.	Statement of strategy and objectives – human resources
15.	Comments on achievement of marketing objectives
16.	Market position
17.	Competition development
18.	Main competitors (disclosed by name)
19.	Description of market development
20.	Description of market development in comparison to competitors
21.	Impact of corporate strategy on current results
22.	Impact of macro-economic variables on current results
23.	Impact of corporate strategy on future results
III.	Acquisitions, Disposals and Alliances
24.	Reasons for the acquisitions
25.	Comments on general effects of the acquisitions
26.	Reasons for the disposals
27.	Comments on general effects of the disposals
28.	Reasons for the strategic alliances
29.	Comments on general effects of the strategic alliances
IV.	Research and Development
30.	Corporate policy on R&D
31.	Description of ongoing R&D activities
32.	Location of R&D activities
33.	Number of employees in R&D
34.	R&D expenses
35.	Future prospects of R&D
V.	Strategic Information about Business Segments
36.	Organisational structure per business segment
37.	Business concept per business segment
38.	Statement of strategy and objectives per business segment
39.	Comments on achievements of these objectives
40.	Geographic distribution per business segment
41.	Description of market development per business segment
42.	Market position per business segment
43.	Main competitors per business segment (disclosed by name)
44.	Competition development per business segment
45.	Description of market development in comparison to competitors
46.	Absolute and relative strength per business segment for the corporation
47.	Impact of macro-economic variables on business segments
48.	Description of investments and structural changes per business segment
49.	Description of products and services per business segment
50.	Description of distribution system per business segment
51.	General future information per business segment
	Financial Information about the Corporation
VI.	General Financial Information
52.	Historical financial review (at least three years)
53.	Historical financial review (at least five years)
54.	Dividend payout policy
55.	Quarterly sales data for the last four quarters
56.	Quarterly earnings data for the last four quarters
57.	Financial information in relation to industry average
58.	Market-share analysis - quantitative
59.	Market-share forecast - quantitative
60.	Profit margin
61.	Return on capital employed (ROCE)
62.	Return on equity (ROE)
63.	Capital turnover (Equity ratio)
64.	Net asset value
65.	Disclosure of intangible valuations (except goodwill and brands)
66.	Economic value added (EVA)
67.	Sensitivity analysis of foreign exchange risk
68.	Statement of interest rate policy
69.	General view about the corporation's sales prospects
70.	General view about corporation's earnings prospects
71.	Advertising expenditure
VII.	Financial Information about Business Segment
72.	Quarterly sales data for the last four quarters per business segment
73.	Quarterly earnings data for the last four quarters per business segment

74.	Business In-Force or contract information per business segment
75.	Return on capital employed (ROCE)
76.	Competitor analysis-quantitative
77.	Financial information in relation to industry average
78.	Market-share analysis-quantitative
79.	Sales forecast per business segment
80.	Sales forecast per business segment
81.	Earnings forecast per business segment
VIII.	Stock Information
82.	Market value at year end
83.	Share price trend during the year in relation to general index
84.	Share price trend during the year in relation to industry index
85.	Share price trend for at least last two years
86.	Share price trend for at least last five years
87.	Dividend yield
88.	Total yield (dividends plus change in market value)
89.	P/E-multiple
90.	EBIT-multiple
91.	Trading volume in company shares
92.	Development of share capital for at least three years
93.	Beta value
94.	Ownership structure (concentration)
95.	Significant shareholders
96.	Number of shares held by each of the significant shareholders
97.	Significant shareholders' ownership measured in votes
98.	Significant shareholders' ownership measured in capital
99.	Names of brokerage companies and banks following the corporation
100.	Names of analysts who produce earnings forecasts
	Nonfinancial Information about the Corporation
IX.	Information about Directors
101.	Age of board members
102.	Educational qualifications (academic and professional)
103.	Other directorships held by executive directors
104.	Date of election to the board
105.	Name of the directors (top management team)
106.	Age of directors
107.	Educational qualifications (academic and professional)
108.	Commercial experience of the executive directors
109.	Other directorships held by executive directors
110.	Date of election to the board
111.	Amount of shares held in the corporation
X.	Employee Information
113.	Number of employees by geographic distribution
114.	Employees distribution by gender
115.	Employees distribution by line-of-business
116.	Number of full-time or permanent employees
117.	Number of part-time or temporary employees
118.	Employee turnover
119.	Reasons for changes in employee numbers or categories
120.	Average years of service with the corporation
121.	Average age of employees
122.	Identification of senior management and their functions
123.	Amount of senior managers
124.	Senior managements distribution by gender
125.	Senior managements average years of service with the corporation
126.	Senior managements average age
127.	Management expense and acquisition costs
128.	Amount spent on training
129.	Nature of training
130.	Categories of employees trained
131.	Number of employees trained
132.	Time in training
133.	IT-equipment for work support (general)
134.	Data on accidents
135.	Cost of safety measures
136.	Redundancy information (general)
137.	Equal opportunity policy statement
138.	Recruitment problems and related policy
XI.	Social Policy and Environmental Information
139.	Statement of charitable donations program
140.	Statement of strategy and objectives of charitable donations program
141.	Amount invested in charitable donations program
142.	Comments on achievements of the charitable donations program
143.	Statement of community program
144.	Statement of strategy and objectives of community program
145.	Amount invested in community program
146.	Comments on achievements of the community program
147.	Statement of environmental policy
148.	Statement of strategy and objectives for the environmental program
149.	Description and implementation of environmental program
150.	Amount invested in environmental program
151.	Comments on achievements of the environmental program

Appendix B

Relevance of Corporate Annual Reports

1. How important do you regard your corporate annual reports to be for company valuation?
 - Which parts in a report do you consider to be most important for company valuation?
 - On which items do you see the need for providing further explanation?
2. Who are the users of your issued information about your company?
 - Do you know what kind of information the users acquire?
 - What medium do the users prefer?
3. How important is it for your company to issue voluntarily disclose information in relation to financial statements information?
 - Increased for you company the amount of disclosure information during the last years?

Corporate Accounting

4. How does your company adapt its accounting system to foreign accounting requirements?
5. How are differences in foreign accounting requirements treated?
6. Do you regard differences in accounting regimes problematic to show a true and fair view of your company?

Company's Information Behaviour

7. Does your company have an explicitly defined strategy for information disclosure?
8. How important is the communication with investors?
9. How important is it to your company to disclose information on human resources?
 - What is your company's strategy on human resources disclosure?
 - Do you know if your investors use information on human resources in their valuation?
 - What kind of advantages or disadvantages may arise for your company disclosing information on human resources?
- 10.S Why is SCANSECURE emphasising on intangible assets and human resources?
 - Why is SCANSECURE working with the Navigator?
 - Is SCANSECURE's Navigator model very different to models of its competitors?
 - Why does SCANSECURE publish information about the Navigator in the annual reports?
 - Has the term Intellectual Capital become out of date for SCANSECURE as you did not use this term since the 199 annual report?
 - Why is SCANSECURE providing the embedded value?
 - Is there a direct link between the Navigator model and the embedded value?
- 10.A Why is ASSURANCE not emphasising on intangible assets and human resources?
 - Why is ASSURANCE not showing more about its human resources than in its present form?
 - Does ASSURANCE have an internal business process model comparable to SCANSECURE's Navigator model?
 - Why didn't ASSURANCE develop Intellectual Capital reports?
 - Is there no demand by investors that ASSURANCE disclose more information on its intangible assets and human resources?
 - Why is ASSURANCE not providing the embedded value?

Level of disclosure

11. Do you find an important information content difference between corporate annual reports prepared according to IAS to those prepared according to domestic GAAP?
12. Do you find that investors make a difference in their valuation between companies who voluntarily disclose more information about their intangible assets and human resources compared to those companies who do not?

Market efficiency

13. What information about intangible assets and human resources should a company issue?
14. Where should information about intangible assets and human resources be published?
15. Are more regulations through laws and recommendations needed for the disclosure of companies' intangible assets?

Appendix C

Relevance of Corporate Annual Reports
<ol style="list-style-type: none"> How important are the corporate annual reports for company valuation? <ul style="list-style-type: none"> Which parts in a report do you consider to be most important for company valuation? On which items do you see the need for providing further explanation? How important is voluntarily disclosed information in relation to financial statements information for company valuation?
Company Analysis & Information Gathering
<ol style="list-style-type: none"> Do you value company's voluntarily disclosed information on intangible assets? Do you use the same valuation model for all companies, or do you make modifications? <ul style="list-style-type: none"> Do you have an in-house model for valuation of voluntarily disclosed information? Mention important information sources that you use when gathering information about a company's intangible assets? <ul style="list-style-type: none"> Do you assemble the information yourself, or do you get hold of it within your company? Do you use a different model valuing ASSURANCE's or SCANSECURE's disclosure on human resources? <ul style="list-style-type: none"> How important is consistency in a company's disclosure policy?
Level of Disclosure ASSURANCE & SCANSECURE
<ol style="list-style-type: none"> Do you find an important information content difference between the corporate annual reports of ASSURANCE (IAS) and SCANSECURE (Swedish Accounts Act for Insurance Companies)? Do you find an important difference in the level of disclosure in the corporate annual reports of ASSURANCE (IAS) and SCANSECURE (Swedish Accounts Act for Insurance Companies)? <ul style="list-style-type: none"> Who disclose most information SCANSECURE or ASSURANCE? Is this difference related to the application of different standards for the annual reports of ASSURANCE and SCANSECURE?
Pros & Cons of Voluntary Disclosure
<ol style="list-style-type: none"> Does ASSURANCE or SCANSECURE benefit by voluntarily disclosing information about its human resources? Is there a difference with respect to the valuation between the companies who choose to voluntarily disclose more information about their intangible assets compared to those who do not? With regard to ASSURANCE or SCANSECURE what kind of advantages may arise with voluntary disclosure on human resources? With regard to ASSURANCE or SCANSECURE what kind of disadvantages may arise with voluntary disclosure on human resources?
Market Efficiency
<ol style="list-style-type: none"> Are there variations in the valuation of ASSURANCE's or SCANSECURE's intangible assets with respect to country and stock market? Is disclosure of intangible assets, especially on human resources, something that facilitates company valuation? Where in the corporate annual report should information about intangible assets and human resources be published? Are more regulations through laws and recommendations needed for the disclosure of companies' intangible assets?

References

- Adrem, A. H. (1999) *Essays on Disclosure Practices in Sweden: Causes and Effects*, Lund University Press, Lund, Sweden.
- Barth, M. and Landsman, W. (1995) *Fundamental Issues Related to Using Fair Value Accounting for Financial Reporting*, Accounting Horizons, pp. 97-107.
- Beaver, W. H. (1998) *Financial Reporting: An Accounting Revolution*, 3rd Ed., Prentice-Hall Inc., Upper Saddle River, USA.
- Becker, B. E., Huselid, M. A. and Ulrich, D. (2001) *The HR Scorecard: Linking People, Strategy, and Performance*, Harvard Business School Press, Boston, USA.
- Bloomfield, R. J. and Wilks, T. J. (2000) *Disclosure Effects in the Laboratory*, The Accounting Review, Vol. 75, No. 1, pp. 13-41.
- Botosan, C. A. (1997) *The Effect of Disclosure Level on the Cost of Equity Capital*, The Accounting Review, Vol. 72, No. 3, pp. 323-50.
- Brooking, A. (1996) *Intellectual Capital: Core Asset for the Third Millennium Enterprise*, International Thomson Business Press, London, UK.
- Bukh, P. N., Larsen, H. T. and Mouristen, J. (2001) *Constructing Intellectual Capital Statements*, Scandinavian Journal of Management, Vol. 17, No. 1, pp. 87-108.
- Burgstrahler, D. C. and Dichev, I. D. (1997) *Earnings, Adaptation and Equity Value*, The Accounting Review, Vol. 72, No. 2, pp. 187-215.
- Buzby, S. L. (1975) *Company Size, Listed Versus Unlisted Stocks, and the Extent of Financial Disclosures*, Journal of Accounting Research, Vol. 13, No. 1, pp. 16-37.
- Carnaghan, C., Gibbins, M. and Ikäheimo, S. (1996) *Managed Financial Disclosure: The Interplay Between Accountability Pressures*, In *Accountability: Power, Ethos and the Technologies of Managing* (Eds, Munro, R. and Mouritsen, J.) International Thomson Business Press, London, UK, pp. 164-181.
- Cascio, W. F. (1999) *Costing Human Resources: The Financial Impact of Behaviour in Organizations*, 4th Ed., South-Western College Publishing, Ohio, USA.
- COM (1995) *Accounting Harmonisation: A New Strategy vis-à-vis International Harmonisation*, Commission of the European Communities, Brussels, Belgium.
- COM (2000) *EU Financial Reporting Strategy: The Way Forward*, Commission of the European Communities, Brussels, Belgium.
- Cooke, T. E. (1989a) *An Empirical Study of Financial Disclosures by Swedish Companies*, Garland Publishing Inc., New York, USA.
- Cooke, T. E. (1989b) *Voluntary Corporate Disclosure by Swedish Companies*, Journal of International Financial Management and Accounting, Vol. 1, pp. 171-195.
- Craighead, A. J. and Hartwick, J. (1998) *The Effect of CEO Disclosure Beliefs on the Volume of Disclosure About Corporate Earnings and Strategy*, Behavioral Research in Accounting, Vol. 10, pp. 240-263.
- Depoers, F. (2000) *A Cost-Benefit Study of Voluntary Disclosure: some empirical evidence from French listed companies*, The European Accounting Review, Vol. 9, No. 2, pp. 245-263.
- Diamond, D. W. and Verrecchia, R. E. (1991) *Disclosure, Liquidity and the Cost of Equity Capital*, The Journal of Finance, Vol. 46, No. 4, pp. 1325-1359.
- Drucker, P. (1993) *Post-Capitalist Society*, Butterworth-Heinemann, Oxford, UK.
- Edvinsson, L. and Malone, M. S. (1997) *Intellectual Capital - The Proven Way to Establish Your Company's Real Value by Measuring its Hidden Brainpower*, Piatkus Publishers Ltd., London, UK.
- Ellis, J. and Williams, D. (1993) *Corporate Strategy and Financial Analysis - Managerial, Accounting and Stock Market Perspectives*, Pitman Publishing.
- Epstein, M. J. and Pava, M. L. (1993) *The Shareholder's Use of Corporate Annual Reports*, JAI Press, Greenwich, USA.

- FASB (2001) *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures*, Financial Accounting Standards Board, Norwalk, USA.
- Fitz-enz, J. (2000) *The ROI of Human Capital: Measuring the Economic Value of Employee Performance*, Amacom, New York, USA.
- Flamholtz, E. (1971) *A Model for Human Resource Valuation: A Stochastic Process With Service Rewards*, The Accounting Review, Vol. 46, No. 2, pp. 253-267.
- Flamholtz, E. G. (1999) *Human Resource Accounting: Advances in Concepts, Methods and Applications*, Kluwer Academics Publishers, Boston, USA.
- Francis, J. and Schipper, K. (1999) *Have Financial Statements Lost Their Relevance?*, Journal of Accounting Research, Vol. 37, No. 2, pp. 319-352.
- Frederiksen, J. V. and Westphalen, S.-Å. (1998) *Human Resource Accounting : interests and conflicts*, CEDEFOP - European Centre for the Development of Vocational Training, Thessaloniki, Greece.
- Gibbins, M., Richardson, A. and Waterhouse, J. (1990) *The Management of Corporate Financial Disclosure: Opportunism, Ritualism, Policies and Processes*, Journal of Accounting Research, Vol. 28, No. 1, pp. 33-39.
- Giner Inchausti, B. (1997) *The Influence of Company Characteristics and Accounting Regulation on Information Disclosed by Spanish Firms*, The European Accounting Review, Vol. 6, No. 1, pp. 45-68.
- Glaser, B. G. and Strauss, A. L. (1967) *The Discovery of Grounded Theory - Strategies for Qualitative Research*, Aldine de Gruyter, New York, USA.
- Gray, S. J., Meek, G. K. and Roberts, C. B. (1995) *International Capital Market Pressures and Voluntary Annual Report Disclosures by U.S. and U.K. Multinationals*, Journal of International Financial Management and Accounting, Vol. 6, No. 1, pp. 43-68.
- Hackston, D. and Milne, M. J. (1996) *Some Determinants of Social and Environmental Disclosures in New Zealand Companies*, Accounting, Auditing & Accountability Journal, Vol. 9, No. 1, pp. 77-108.
- Heikiman, J. S. and Jones, C. H. (1967) *Put People on Your Balance Sheet*, Harvard Business Review, Vol. 45, No. 1, pp. 107-113.
- Hendriksen, E. S. (1982) *Accounting Theory*, Richard D. Irwin Inc., Homewood, USA.
- Hendriksen, E. S. and VanBreda, M. F. (1992) *Accounting Theory*, 5th Ed., Richard D. Irwin Inc., Homewood, USA.
- Hermanson, R. (1964) *Accounting for Human Assets*, Michigan State University, USA, East Lansing.
- IASC (1999) *Issues Paper on Insurance*, IASC Steering Committee on Insurance, London, UK.
- Kaplan, R. S. and Norton, D. P. (1992) *The Balanced Scorecard: Measures that Drive Performance*, Harvard Business Review, Vol. 70, No. 1, pp. 71-79.
- Kelly, K. (1998) *New Rules for The New Economy: 10 Radical Strategies for a Connected World*, Viking, New York, USA.
- Kim, O. (1993) *Disagreement among Shareholders over a Firm's Disclosure Policy*, The Journal of Finance, Vol. 48, No. 2, pp. 747-760.
- Klein, D. A. (1997) *The Strategic Management of Intellectual Capital*, Butterworth-Heinemann, Boston, USA.
- KPMG (1999) *Options in European Insurance Accounting Rules*, KPMG Deutsche Treuhand-Gesellschaft AG, Köln, Germany.
- Lang, M. H. and Lundholm, R. J. (1993) *Cross-Sectional Determinants of Analyst Ratings of Corporate Disclosures*, Journal of Accounting Research, Vol. 31, No. 2, pp. 246-271.
- Lang, M. H. and Lundholm, R. J. (2000) *Voluntary Disclosure and Equity Offerings: Reducing Information Asymmetry or Hying the Stock?*, Contemporary Accounting Research, Vol. 17, No. 4, pp. 623-663.
- Leftwich, R., Watts, R. L., Zimmerman, J. L., Burton, J. C. and Schipper, K. (1981) *Voluntary Corporate Disclosure: The Case of Interim Reporting*, Journal of Accounting Research, Vol. 19, No. Supplement, pp. 50-89.

- Lev, B. (1989) *On the Usefulness of Earnings and Earnings Research: Lesson and Directions from Two Decades of Empirical Research*, Journal of Accounting Research, Vol. 27, No. Supplement, pp. 153-192.
- Lev, B. (1992) *Information Disclosure Strategy*, California Management Review, Vol. 34, No. 4, pp. 9-32.
- Lev, B. (1997) *The Old Rules No Longer Apply*, Forbes ASAP, Vol. April 7.
- Lev, B. and Schwartz, A. (1971) *On the Use of the Economic Concept of Human Capital in Financial Statements*, The Accounting Review, Vol. 46, No. 1, pp. 103-112.
- Meek, G. K., Roberts, C. B. and Gray, S. J. (1995) *Factors Influencing Voluntary Annual Report Disclosures by U.S., U.K. and Continental European Multinational Corporations*, Journal of International Business Studies, Vol. 26, No. 3, pp. 555-574.
- OECD (1996) *The Knowledge-Based Economy*, OECD, Paris, France.
- O'Shaughnessy, J. P. (1998) *What Works on Wall Street*, McGraw-Hill, New York, USA.
- Parker, L. D., Ferris, K. R. and Otley, D. T. (1989) *Accounting for the Human Factor*, Prentice-Hall of Australia Pty Ltd, Sydney, Australia.
- Parker, L. D. and Roffey, B. H. (1997) *Back to the Drawing Board: Revisiting Grounded Theory and the Everyday Accountant's and Manager's Reality*, Accounting, Auditing & Accountability Journal, Vol. 10, No. 2, pp. 212-247.
- Phillips, J. J., Stone, R. D. and Pulliam Phillips, P. (2001) *The Human Resources Scorecard: Measuring the Return On Investment*, Butterworth-Heinemann, Woburn, USA.
- PricewaterhouseCoopers (2000) *International Accounting Standards: Disclosure Checklist 2000*, PricewaterhouseCoopers, Copenhagen, Denmark.
- Rimmel, G. (2001) *Book review on Karl E. Sveiby's The New Organizational Wealth: Managing & Measuring Knowledge-Based Assets*, Scandinavian Journal of Management, Vol. 17, No. 4, pp. 522-524.
- Shapiro, C. and Varian, H. R. (1998) *Information Rules: A Strategic Guide to the Network Economy*, Harvard Business School, Boston, USA.
- Silverman, D. (1997) *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*, (originally published 1993), Sage Publications, London, UK.
- Singhvi, S. S. and Desai, H. B. (1971) *An Empirical Analysis of the Quality of Corporate Financial Disclosure*, The Accounting Review, Vol. 46, No. 1, pp. 129-138.
- Spero, L. L. (1979) *The Extent and Causes of Voluntary Disclosure of Financial Information in Three European Countries: An Explorative Study*, Harvard University Press, Boston, USA.
- Stewart, T. A. (1997) *Intellectual Capital: The New Wealth of Organizations*, Nicholas Bready Publishing Limited, London, UK.
- Strauss, A. L. and Corbin, J. M. (1990) *Basics of Qualitative Research - Grounded Theory Procedures and Techniques*, Sage Publication Inc., Newbury Park, USA.
- Sveiby, K. E. (1997) *The New Organizational Wealth: Managing & Measuring Knowledge-Based Assets*, Berrett-Koehler, San Francisco, USA.
- Tyson, S. (1995) *Human Resource Strategy: Towards a General Theory of Human Resource Management*, Pitman Publishing, London, UK.
- Watts, R. L. and Zimmerman, J. L. (1990) *Positive Accounting Theory: A Ten Year Perspective*, The Accounting Review, Vol. 65, No. 1, pp. 131-156.
- Zuboff, S. (1988) *In the Age of the Smart Machine: The Future of Work and Power*, Heinemann Professional, Oxford, UK.