How intellectual capital information is used in Australian analyst reports

Subhash Abhayawansa
Faculty of Business and Enterprise, Swinburne University of Technology, Australia

James Guthrie
Department of Accounting and Corporate Governance, Macquarie University, Australia
and
Faculty of Economics, Bologna University, Italy

Corresponding author
Dr. Subhash Abhayawansa
Faculty of Business and Enterprise, Swinburne University of Technology, Australia
sabhayawansa@swin.edu.au
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Abstract

This paper explores the qualitative characteristics of intellectual capital information (ICI) used and communicated by sell-side analysts in initiating coverage reports written on Australian companies. Through the use of a multi-dimensional coding framework, it addresses the issue of how, as against what, ICI is used in analyst reports. The study is motivated by the increasing importance of ICI in explaining firm value and the lack of a common understanding of the utility of ICI and its links with value creation from a capital markets perspective. Our results highlight that the use of ICI by sell-side analysts is a multi-faceted phenomenon. We find that ICI is used discursively in explaining the ‘value creation story’ of the company and in justifying analysts’ forecasts and estimates. Also, graphs and charts are used to visualise IC. The quantitative information (both monetary and non-monetary) established is used to derive expectations about future growth rates, earnings and cash flows. It was found that ICI is used more optimistically than negatively; and in a more forward-looking manner, emphasising value creation, rather than in a past-oriented manner focusing on value realisation. However, we find clear differences in the way external, internal and human capital information is used. The findings of this study have broader implications for improving corporate reporting to analysts as well as other key capital market constituents.

Key words: analyst report, content analysis, intellectual capital, sell-side analyst.
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1. Introduction

Recent decades have seen significant developments that have transformed the ‘value creation’ processes of companies, not only in knowledge/service based industries, but also in traditional industries (Ashton, 2005; Guthrie, Petty, and Johanson, 2001; Holland, 2004; Lev, 2001; OECD, 1999). As a result of these transformations, it is argued, the potential for creating and sustaining competitive advantage and long-term corporate value lies more in the management of intellectual capital (IC) than in tangible assets (Daley, 2001; García-Ayuso, 2003; Guthrie, et al., 2001; Petty and Guthrie, 2000). IC refers to knowledge value drivers of an entity comprising relational (or external) capital (e.g., customer relationships, firm reputation, business collaborations); structural (or internal); capital (e.g., management systems, know-how, business models); and human capital (e.g., employee skills, knowledge and competences) (OECD, 1999; Stewart, 1997).

Regulators (e.g., DMSTI, 2003; FASB, 2001; GFMEL, 2004; JMETI, 2005) and professional accounting bodies (e.g., AICPA, 1994; CICA, 1995) recommend that corporate reporting should provide information on firms’ value creation processes and leading indicators of firms’ value (or intellectual capital information (ICI)). In response to these calls, work has been carried out at organisational, national, and international levels to supplement and complement traditional financial statements by providing information on knowledge value drivers of companies. These include guidelines and frameworks for reporting IC and preparing IC statements that supplement the conventional annual report (Ricceri and Guthrie, 2009). It is believed that availability of intellectual capital information (ICI) to stakeholders has increased due to these initiatives (García-Ayuso, 2003). For instance, Campbell and Rahman (2009) observed an overall increase in IC reporting over a 31 year period from 1978 to 2008 and suggest that it reflects the demand in the market for information.

Studies done with end users of corporate information find that ICI is required to make and evaluate investment decisions (e.g., Barker, 1998; Holland, 2006; Lim, Chan, and Dallimore, 2009; Low and Siesfeld, 1998; Thomas, 2003). Despite suggestions for improving corporate reporting and the resultant progress that has been made, prior
research highlights that companies still do not provide enough information on their value creation processes and how IC is used and managed for future value creation. Therefore, sell-side analysts, as capital market intermediaries, have a role to play in explaining to the investment community the intricacies of value creation in firms.

Sell-side analysts intermediation role in the capital markets involves searching and gathering information on a company from public and private channels; analysing and interpreting this information using models and heuristics; forecasting firms’ future earnings, cash flows and growth rates; and issuing reports on companies with a recommendation to buy, hold or sell the security (Gniewosz, 1990). Other capital market actors, such as buy-side analysts, fund managers and retail investors, rely on sell-side research for making investment and portfolio selection decisions (Campbell and Slack, 2008; Core, 2001; Fogarty and Rogers, 2005; Galanti, 2006; Holland, 2006; Holland and Johanson, 2003; Johansson, 2007). Prior research confirms that the summary measures communicated in analyst reports (i.e. earnings forecasts, price targets and investment recommendations), as well as strength of analysts’ arguments and supporting information presented therein, are considered informative for investment decisions (e.g., Asquith, Mikhail, and Au, 2005; Brav and Lehavy, 2003; Francis and Soffer, 1997; Hirst, Koonce, and Simko, 1995; Krishnan and Booker, 2002; Womack, 1996).

Many prior studies have focused on identifying the level of importance capital market participants, especially sell-side analysts, place on different types of non-financial and IC information with the belief that they provide an indication to companies about the information needs of users (e.g., Orens and Lybaert, 2007; Previts, Bricker, Robinson, and Young, 1994; Rogers and Grant, 1997). This research implicitly takes the positivist stance that IC elements can be objectively known and they are related to organisational performance in one fundamental way (Mouritsen, 2006). Researchers have criticised this view arguing that IC elements are interrelated and their impact on corporate performance is fluid, transient and non-linear (Cuganesan, 2005; Cuganesan and Dumay, 2009; Mouritsen, 2006). Hence, the more important question is how capital market participants use ICI and create meaning from it. From a research point of view “asking how is more revealing as it addresses the praxis of IC” (Dumay, 2009, p.194). However, there is scant research on how, as against what, ICI is used by
capital market participants. Although some progress has been made in understanding the former in relation to fund managers and buy-side analysts (e.g., Holland, 2001; Holland, 2006; Holland and Johanson, 2003) research on the use of ICI by sell-side analysts has had a relatively narrow focus.

Extant research relating to analysts has only addressed the types of ICI considered most important or useful (e.g., Orens and Lybaert, 2007), impact of ICI on forecasts and recommendations (e.g., Ghosh and Wu, 2007; Thomas, 2003) and types of ICI disclosed in analyst reports (e.g., Flöstrand, 2006; García-Meca, 2005; García-Meca and Martínez, 2007; Nielsen, 2008). In addition, Holland (2004) attempted to explain the company managements’ view of how capital market participants (including analysts) used ICI. However, research is lacking on how analysts use ICI from their perspective (Abhayawansa and Abeysekera, 2009). A better understanding of this phenomenon can enable companies to strategically communicate ICI to the capital market and benefit regulators (e.g., standard-setters or stock exchanges) in their quest to improve the quality of corporate information, and meet the information needs of the investment community. Such an examination also enables the assessment of analysts’ contribution in processing and disseminating ICI to the investment community.

The aim of this paper is to contribute to an understanding of how ICI is used by sell-side analysts. This is done by content-analysis of initiating coverage analyst reports written on Australian listed companies. The content analysis revolves around three unique qualitative dimensions of ICI in analyst reports. These include: (1) evidence (i.e., discursive (non-numerical), numerical (non-monetary), numerical (monetary) and visual]; (2) news-tenor (i.e., positive, neutral and negative); and (3) time-orientation (i.e., forward-looking, non-time-specific and past-oriented). As the analyst report is both a record of the analysts’ decision processes and a medium to communicate their opinions and recommendations, this investigation is expected to provide insights into ICI use.

The remainder of this paper is organised as follows. Section 2 reviews the literature on the use of ICI in company analysis. Section 3 describes the research method adopted in this study. Section 4 presents the findings. Section 5 discusses the results and concludes the paper.
2. Use of IC information in company analysis

Several prior studies have investigated ICI use by analysts via content analysis of analyst reports. These researchers argue that ICI used in company analysis is disclosed by analysts in their reports (e.g., Arvidsson, 2003; Flöstrand, 2006; Flöstrand and Ström, 2006; García-Meca, 2005). Although there is debate as to whether analysts disclose all information utilised in their decision-making processes, most agree that analyst reports contain the majority of the information used by analysts (Orens and Lybaert, 2007) and the information included therein provides a formal explanation of the investment recommendations they carry (Govindarajan, 1980). An investigation of the manner in which ICI is referred to in analyst reports provides another perspective to understand the utility of ICI. However, there is no published work that provides such an analysis of ICI use by analysts in their reports – the gap addressed in this study.

Qualitative characteristics, such as evidence, news-tenor and time-orientation have been investigated in analyst reports for types of information other than ICI. For instance, Abdolmohammadi et al., (2006) examined evidence (or qualitative and quantitative references) of non-financial information in analyst reports. They found that non-financial information is increasingly being disclosed quantitatively, suggesting that analysts attempt to evaluate the impact of non-financial information on future firm value. Also, the prior literature has investigated news-tenor in analyst reports, and has found that good news dominates bad news. For instance, Fogarty and Rogers (2005) found that analysts more often speak well of the company management and their plans than they speak ill of them. This optimism is commonly attributed to analysts’ attempt to curry favour with management to obtain access to company information on a priority basis. Moreover, Fogarty and Rogers (2005) examined the use of time-oriented verbs in analyst reports. Such an examination provides evidence as to whether analysts believe that the past will repeat itself, or that future performance has little to do with past successes/failures, but largely depends on a company’s present and future activities. It was observed that analyst reports predominantly dwell on the past, contradicting the popular expectation that analyst reports are forward-looking. The present study extends the literature by investigating these qualitative characteristics in relation to ICI.
A firm’s market value cannot be determined as the sum total of individual values of all assets: physical, financial and intangible. Analysts generally value companies using projections of future financial performance or cash flows (Flöstrand, 2006). In this process, ICI is considered vital in predicting the quality and sustainability of current earnings (Thomas, 2003), future growth (Boedker, Mouritsen, and Guthrie, 2008), expected level of residual future cash flows (Holland, 2004), and the risk premium (Boedker, et al., 2008; Holland, 2004). The use of ICI in analyst reports to justify investment recommendations has also been previously observed (Breton and Taffler, 2001; García-Meca and Martínez, 2007). Nonetheless, with few exceptions (e.g., management quality), how different types of ICI is utilised for these purposes has not been researched. This paper intends to shed some light on this issue.

Management quality is a type of IC that is at the centre of analysts’ information agenda (Barker, 1999; Bismuth and Kirkpatrick, 2006; Holland, 2004; Previts, et al., 1994). It is used to determine the terminal value in dividend discount model based valuations, the ability of the firm to outperform in periods beyond the foreseeable future (Barker, 1999) and the likelihood of top management going ahead with an indicated strategy (Holland and Johanson, 2003). Also, information on management quality helps analyst to deal with the complexity associated with the use of qualitative information, such as IC (Almqvist and Henningsson, 2009) and assess the ability to rely on ICI provided by management (Nielsen, 2008). In the examination of ICI use, this study will explore how information about firm management is utilised in analyst reports within the broader context of human capital.

It has been argued that analysts construct a unique picture or mosaic of information as a step in the company valuation process (Day, 1986; Holland, 2004; Nielsen, 2008). Holland (2006) argues that this mosaic provides a coherent means to combine ICI with other fragmented information to construct a broader picture of a company’s value creation story and enables analysts to assess the impact of ICI on corporate valuations. The mosaic approach is also explained as helping analysts to deal with the problems of understanding and using ICI supplied by companies (Holland and Johanson, 2003). Nielsen (2008) contends that only the long-term oriented analysts are interested in building a case on the company and see their competitive advantage as being derived from communicating the company value creation story in an
understandable manner. They utilise ICI in this process. On the contrary, he found that so called trigger oriented analysts are primarily concerned with predicting the stock price and thus do not utilise ICI as much.

3. Research method

We conduct a content analysis of analysts’ initiating coverage reports. Compared to other types of analyst reports, initiating coverage reports are greater in length and not affected by time and space constraints. They provide more opportunity for analysts to explain in detail their analysis of the company and justify forecasts and recommendations.

The sample consisted of initiating coverage analyst reports on 64 companies included in the S&P/ASX 300 index. The analyst reports included in the sample originated from 15 stockbroking firms registered with the Australian Securities Exchange. Companies were selected so as to represent eight Global Industry Classification System (GICS®) sectors that ranged from high to low IC-intensity. The eight largest companies by market capitalisation for which an initiation coverage report written within the five years to 01 July 2008 was available were selected for each GICS sector. Size and sector were considered in sample selection as prior evidence suggests that non-financial information considered important to the capital market differs by these factors (Eccles and Mavrinac, 1995; Low and Siesfeld, 1998).

Only one analyst report was obtained for each company. The main source of initiating coverage reports was the OneSource Global Business Browser database. When more than one analyst report on a company qualified for selection, the most recent report was chosen. Sampled analyst reports not available in this database were sourced in several ways, including directly contacting analysts covering the relevant companies, downloading from company websites, and purchasing through Thomson Analytics database.

3.1. Qualitative content analysis

Content analysis is “a research technique for making replicable and valid inferences from texts (or other meaningful material) to the context of their use” (Krippendorff, 2004a, p.18). Qualitative content analysis is used in this study, which goes beyond
mere counting of words to investigating meanings, themes and patterns in textual material. Zhang and Wildemuth (2009) contrast qualitative and quantitative content analysis on several aspects (see, Table 1). However, Holsti (1969, p.11) notes that “qualitative and quantitative are not dichotomous attributes, but fall along a continuum” and these aspects complement each other.

Qualitative content analysis is a suitable method of inquiry in the context of this study for several reasons. First, this is an exploratory study intended to inductively draw inferences on how analysts use IC information. Second, it is a method for systematic analysis of information contained in documents (or other media) to assess patterns of disclosure using frequency as a proxy for the magnitude of importance (Berg, 1998; Holsti, 1969). Third, it is an unobtrusive and non-reactive method of collecting data about phenomena of interest (Krippendorff, 2004a). Interference with the phenomena being investigated can contaminate data, especially when subjects (e.g., respondents) show a tendency to alter their behaviour patterns, respond in a socially desirable manner or attribute more rational thought processes to past decisions (Krippendorff, 2004a; Morris, 1994). This is particularly the case for other methods of evaluating analysts’ thought processes, such as interviews, focus groups, surveys, controlled experiments, or field studies (Jones and Shoemaker, 1994; Morris, 1994). As analyst reports are neither prepared for content analysis nor to be read by a researcher, the measurement process will not confound data generation (Smith and Taffler, 2000). Fourth, content analysis “preserves the conceptions of the data’s sources, which structured methods largely ignore” (emphasis in original) (Krippendorff, 2004a, p.41). Content analysis investigates information once that information has been generated for a different purpose and audience. Although this approach results in unwanted confounding information being inherited by the researcher, it is particularly beneficial for exploratory research such as the present study, as ICI use in analyst reports is largely an under-explored area.

3.2. Process of content analysis

In content analysis, the data is a product of the procedures chosen by the researcher to analyse the selected texts (Krippendorff, 2004a). Therefore, it is vital to explain the
specific procedures adopted and decisions made in the operationalisation of the content analysis method so that the readers understand the data generating and inference making processes (Steenkamp and Northcott, 2007).

An important decision when undertaking content analysis is the selection of the unit of analysis (recording unit). It is the “specified segment of content that is characterised by placing in a given category” (Holsti, 1969, p.116). This study uses text units as the narrative recording unit. Beattie and Thomson (2007, p.142) define a text unit as a group of words or part of a sentence containing a “single piece of information that [is] meaningful in its own right”. It is a single assertion about some subject. Unlike grammatical units of the language it is difficult to identify boundaries for text units. Hence, each sentence containing more than one piece of information has to be edited to identify the text units it contains. This approach avoids coding dilemmas that arise due to multiple IC references being present in a given sentence (Campbell and Rahman, 2009).

Analyst reports frequently include tables, graphs, charts and figures and sometimes pictures. Prior content analysis studies on analyst reports have either excluded visuals (e.g., Breton and Taffler, 2001; Nielsen, 2008) or not been explicit about the coding of visuals. Given that visuals are an important medium for communicating IC (Steenkamp, 2007) and the current research investigates all references to IC, visuals are included and analysed. Following Beattie and Thomson (2007, p.142) information item is used as the visual recording unit and it is defined similarly to a text unit. An information item derives its meaning from the entire visual and its context. For example, a single cell in a table may be considered as an information item, but the cell obtains its meaning from its column and row headers, others cells, caption of the table and footnotes to the table.

As this study concerns how ICI is used in analyst reports, an IC categorisation scheme and coding rules were developed to identify IC related text units/information items. The IC categorisation scheme is based on Sveiby’s (1997) tripartite taxonomy of IC, where IC is categorised into external capital (ExtC), human capital (HumC), and internal capital (IntC). IC subcategories were developed under the three main categories pursuant to an extensive review of the accounting and management literatures and thereafter modifying the initial categories during test-coding. Hsieh
and Shannon (2005) state that one approach to developing coding categories in qualitative content analysis is to start with prior research findings or theory and allow themes to emerge from the text during data analysis.

After IC related text units/information items were identified, the second stage of coding involved analysing them under the evidence, time-orientation and news-tenor dimensions (see Figure 1).

<Insert Figure 1 about here>

On the evidence dimension, we classify IC related text units/information items into discursive (non-numerical), numerical (non-monetary), numerical (monetary), and visuals. Although visuals are a powerful way of communicating information, it has not been systematically examined previously in analyst reports. Guthrie et al., (2004) encourage researchers to extend content analysis to capture IC communicated through visuals, which include diagrams, tables, figures, charts, graphs, and photographs.

According to the time-orientation dimension, IC related text units/information items are classified into three categories: forward-looking, non time-specific, and past-oriented. Time-orientation in analyst reports can be used to infer whether analysts use IC to communicate value realisation, or value creation (Ashton, 2005; Fincham and Roslender, 2003). Reporting on value realisation is backward-looking and communicates information on historical value generated by a firm. In contrast, ICI is forward-looking and concerned with reporting value creation. Boedker, Guthrie, and Cuganesan (2005, p.515) explain that reporting value creation is about “communicating the capacity of an organisation to deliver sustainable competitive advantage now and in the future”.

Three news-tenor categories are used: positive, negative and neutral. Although news-tenor has been investigated in analyst reports previously, in the most part it has been to understand the balance of good news versus bad news or to examine the tonality of references to company management (e.g., Fogarty and Rogers, 2005) or financial indicators (e.g., Breton and Taffler, 2001). This analysis offers an opportunity to examine the laudatory aspect of IC and use of IC in communicating ‘value creation’ versus ‘value destruction’.
3.3. Reliability

Coding was done by one of the authors of this paper. When one person is solely responsible for coding, it is vital that the coding instrument is reliable and the coder is sufficiently trained. Milne and Adler (1999) propose that establishing reliability of the coding instrument across data sets and coders reduces the need for multiple coders. Reliability of a coding instrument can be improved by selecting content categories from well-grounded relevant literature, clearly defining them and introducing well-specified decision rules (Guthrie et al., 2003; Holsti, 1969).

In the process of developing IC content categories, a preliminary set of IC categories was developed from a thorough review of the literature. Afterwards, a sample of analyst reports was test coded using these content categories. Modifications to content categories were made whenever the imposed categories were non-representative and inadequate. This process provided assurance that the content categories are, in fact, contained within the analyst reports, although originated in the literature. Each time a report was test-coded, changes were made to the coding instrument to rectify potential coding problems and clarify coding rules. This process was repeated several times until the authors were satisfied as to the reliability of the coding instrument. The coding instrument developed in this manner comprised the elements recommended by Boyatzis (1998) to be included in a good coding instrument.

A pilot study was conducted to assess the reliability of the coding instrument. In the pilot study, the author and a researcher acquainted with a non-business related discipline independently coded 378 randomly selected sentences and visuals from analyst reports. The level of agreement between the two coders was assessed based on widely accepted reliability coefficients (see Table 2) and is found to be above the acceptable levels.

Training provides the coder familiarity with the texts, coding categories, operational definitions and decision rules, thereby minimising subjectivity (Ahuvia, 2001) and as a result increasing intra-coder reliability. The author who conducted the coding in this study received sufficient training when he coded 52 analyst reports prior to commencing the data collection. Intra-coder reliability was assessed under a test-
retest condition by re-coding three analyst reports randomly selected from the sample, three months from the initial coding. Krippendorff’s alpha coefficients calculated based on the reliability data was more than 0.815 for every coding level providing evidence of the stability of the data.

4. Findings

A total of 3567 IC related text units/information items were identified in the 64 analyst reports (an average of 55.73 IC references per report). With one exception, all analyst reports contain some ICI. The maximum number of IC references per report is 273.

Table 3 provides the frequency distribution (both absolute and relative) of IC references (by category and subcategory) in the evidence, news-tenor and time-orientation categories. The following subsections provide findings on evidence, news-tenor and time-orientation of IC references in analyst reports.

<Insert Table 3 about here>

4.1. Evidence dimension of intellectual capital information

Table 3 highlights that ICI is presented overwhelmingly in discursive (non-numerical) form. Although a significant percentage of ICI found in analyst reports is quantified (30 per cent), monetary values are rarely attributed to them. The results indicate that although a small proportion of ICI is communicated visually, these references are found in 64 per cent of the analyst reports in the sample.

All IC categories are predominantly referred to discursively. However, the proportion of discursive statements in these categories ranges from 54 per cent in ExtC to 85 per cent in IntC. In contrast, the proportion of numerical expressions (monetary and non-monetary together) is greatest for ExtC (42 per cent) and smallest for IntC (10 per cent). HumC falls in between ExtC and IntC in terms of proportion of references of discursive (non-numerical) and numerical (both monetary and non-monetary together) nature. Whilst numerical-monetary expressions are scarce in all three categories, they are scarcer in the HumC category. Similar results are obtained for the use of imagery.
in communicating IC across the three IC categories, except that visual expressions are not found at all in relation to HumC.

As highlighted in Table 3, all IC subcategories except ‘financial relations’ and ‘market share’ are overwhelmingly communicated discursively (non-numerically). The high count of numerical (but non-monetary) expressions in the ‘financial relations’ subcategory is the result of the number of shares held by shareholders and their percentage shareholding being coded into that subcategory:

Major shareholder Japanese brewer Kirin (46%) currently has three board members (Lion Nathan Limited).

TIM works with around 15,000 grower investors, about 30% of which have invested more than once (Timbercorp Limited).

It is possible that shareholding in a company is expressed numerically in order to build confidence among investors by indicating that large proportions of the company are owned by named investors. In addition, frequent references are made to shareholdings of employees and managers of the company, which are also captured under the ‘financial relations’ subcategory:

The staff, including principals, owned approximately 18.2% of the vehicle as at 30 June 2004. Stephen Day and Peter Hurley owned approximately 10.5m securities each, while Barry Wynne owned 8.0m (Valad Property Group).

Importantly, key members of the management team still have equity (roughly 6% of the company) and performance incentives (receive additional equity after five years if 10% IRR or greater is achieved) (Challenger Infrastructure Fund).

Following the recent sell-down, BNB staff ownership is 47% and while further stock comes out of escrow in the next two years we estimate staff ownership is likely to remain above 33% in the medium term (Babcock & Brown Limited).

Perhaps, referring to shareholdings of employees and managers in the context of other information in analyst reports may be an attempt by analysts to build confidence in the company and communicate congruence between the management and shareholders. This is beneficial from a company valuation perspective, as the more
evidence of reduction in agency costs the more favourable the ultimate company valuation.

The high level of numerical (non-monetary) expressions in the ‘market share’ subcategory is mainly due to the nature of this information. The types of ICI generally coded into this subcategory are the proportion (or analysts’ estimated proportion) of the total market served by a company and changes in these proportions over time:

With $179bn of FUA, it is estimated that Perpetual has 70–80% market share in the corporate trust market (Perpetual Limited).

In 2007, we forecast HSP/SYB will have a 13.1% share of the Australian DI market (Healthscope Limited).

A further examination of the narratives coded into the ‘market share’ subcategory finds that at times market share proportions are projected or estimated by analysts so that they can be incorporated into the company valuation process. For instance, the analyst report for Metcash Limited notes “MTT’s national market share at April 2003 was 16.1%. We believe MTT’s market share can grow to 16.5% by the end of 2004”. Similarly, market share proportions are being used with market growth rates as an indication of prospective revenue growth:

Officeworks is the largest player in the fragmented Australian office retail supplies industry with ~16% retail market share, with the industry growing revenue at circa 5%pa (Wesfarmers Limited).

Moreover, information on the current market position of a company vis-à-vis its competitors is used in making financial estimations. The following extract from an analyst report on Consolidated Media Holdings Limited exemplifies that the market position of the company is an input in the calculation of the Enterprise Value (EV)/EBITDA multiple:

In the case of magazines we have applied an EV/EBITDA multiple of 9.0 times which reflects the leading market position of ACP Magazines offset by increasing competition from Pacific Magazines, News Corporation and others in the context of the relatively mature nature of the magazine market in Australia.
Information on ‘brands’ are expressed nearly half the time in numerical (non-monetary) form. This is partly explained by the ‘brands’ subcategory having many references to proportionate contributions of specific brands to sales. For instance, the analyst report on Billabong International Limited states ‘Billabong brand contributes about 70% to sales’. Analysts seem to evaluate the performance of a company’s brands relative to other brands in the company as well as competitive brands. They also analyse longitudinal changes in the contribution of brands to sales:

FGL’s main beer brand, VB, fell 2% YoY on a value basis (volumes fell 6.2% YoY), with beer brands the only declining brands in the top 20 (three owned by FGL and one owned by LNN).

In contrast, a significant proportion of numerical-monetary expressions (13 per cent) of IC is observed in relation to the ‘business collaborations’ subcategory. Further examination of the narratives code as monetary ‘business collaborations’ related references indicates that the bulk of them are about synergistic benefits resulting from business collaborations that can readily be incorporated into analysts’ estimation and forecasting processes.

Synergies from the combination of the AB and ZLB Bioplasma businesses are estimated at just over US$110m, with most of those changes coming in FY06 and FY07, as management has issued guidance that it will take the full inventory cycle for them to become apparent (CSL Limited).

Over the past 12 months, we estimate that the Saime acquisition added approximately $50 million in incremental sales (ResMed Inc).

Only a few IC subcategories are expressed visually. However, a significant proportion of information in the ‘organisational and management structure’ (26 per cent) and ‘market share’ (15 per cent) subcategories are communicated this way. Explaining this information visually can be understood as analysts trying to provide clarity in the understanding of ICI within a given context. Analysts’ discussion of a company’s group structure, divisional structure or management structure using tree diagrams explains the high incidence of visual information in the ‘organisational and management structure’ subcategory. Such information provides a foundation to understand other aspects of the company and its IC linkages. Visual communication
of market share information mainly takes the form of pie charts and bar charts, depicting either analysed company’s market share compared to other players in the market or changes in the market share of the company over time. Figures 2 and 3 shows such references extracted from the analyst report on Fosters Group Limited.

<Insert Figures 2 and 3 about here>

4.2. News-tenor dimension of intellectual capital information

As Table 3 highlights, ICI is mostly used to portray a company positively by emphasising IC as strengths of a company and relating IC to current or potential benefits it may provide. Negative references are only 4 per cent of total references. This pattern of use of news-tenor is observed across the ExtC, HumC, and IntC categories.

The relative use of positive (negative) tenor is greatest (smallest) in the HumC category. Information on employees’ educational qualifications, skills, capabilities and work experience and the management team are overwhelmingly referred to positively in analyst reports. References to employees’ educational qualifications and work experience are coded positively unless analysts mention that, for example, an employee lacks experience in a certain area or is not properly qualified. Such negative references are extremely rare in analyst reports.

Given that the majority of positive HumC information, in fact, refers to company management, the results support the contention that analysts are positive about the management on whom they depend for information. For instance, Fogarty and Rogers (2005), analysing the characterisation of management in analyst reports, found that positive statements about company management are fifteen times as likely as negative statements. Our results indicate that even when analysts are compelled to criticise company management they are not forthright with negative comments. Such references are generally of the form of casting doubt about their future performance:

However, the recent profit downgrade has highlighted the industry risk associated with generics and cast doubt on management’s ability to handle these external market failures (Sigma Pharmaceuticals Ltd).
Investors so far appear unwilling to back what is still a relatively new and unproven management team (Challenger Financial Services Group Ltd).

In turn, concern remains about new management’s ability to rebuild the company and to capitalise on the growth opportunities […] (Australian Pharmaceutical Industries Limited).

Nonetheless, ‘management team’ is not the only HumC subcategory that captures references to company management – it only contains references to the management as a collective. Other HumC subcategories such as ‘employees (other)’, ‘remuneration and incentive schemes’, ‘skills and capabilities’ and ‘work experience’ predominantly contain references to senior managers and the board of directors of the company. Negative references in those subcategories are especially rare.

The ‘employee (other)’ subcategory contains 85 per cent of neutral statements. Content coded into this subcategory generally pertains to the names and dates of appointment of senior executives and Board members, and roles and responsibilities of employees including managers. These types of information essentially carry a neutral tenor.

In the ExtC category the majority of subcategories contain positive references. The highest incidence of positive references is found in the ‘corporate image and reputation’ subcategory. The following excerpts exemplify how analysts try to portray a company positively in the minds of the reader through ‘corporate image and reputation’ related information:

TTS has held the lotteries licence in Victoria since 1954 and is the only non-government-owned licence operator in Australia (Tatts Group Limited).

TIM has a strong track record in the agribusiness investment management sector and has been developing agribusiness projects since 1987 and issuing prospectuses since 1992 (Timbercorp Limited).

Founded in the United States in 1977, Babcock & Brown (BNB) is a global investment and advisory firm with longstanding capabilities in structured finance, syndication and investment management (Babcock & Brown Limited).
Information on ‘brands’ and ‘financial relations’ are distinguishable from the rest of the ExtC subcategories as they are least often expressed positively. These two subcategories overwhelmingly convey neutral connotations. Although the use of negative tenor is rare in the ‘market share’ and ‘brands’ subcategories, they have relatively high proportions of negative statements compared to other ExtC subcategories.

These findings suggest that analysts do not always try to show positive aspects of ExtC. This is particularly the case in analysts’ discussions using ‘brands’ and ‘market share’ related information:

In FY07, sales on Sigma’s Simvar, Lipostat and Xydep products decreased $37m on the pcp after the expiry of its exclusive distribution licences and the entry of new generic suppliers (Sigma Pharmaceuticals Limited).

Wolf Blass and Yellowglen continue to perform for FGL, with Jamiesons Run under pressure (Foster’s Group Limited).

Accordingly, even assuming ALM will gain share from the direct market, we believe it will struggle to increase from its current —34% market share (Aristocrat Leisure Limited).

Similar to the observations in relation to ExtC and HumC, news-tenor used in referring to the majority of IntC subcategories is predominantly positive. For instance, IntC categories, such as ‘business model’, ‘corporate culture’, ‘IT & IS’, ‘management philosophy’, ‘organisational and business expertise’, ‘quality’, ‘R&D’ and ‘technology’ contain high proportions of positive references. Subcategories such as ‘organisational and business expertise’ and ‘business model’ tend to be used in an evaluative manner in the discussion of the value creation potential of the company:

The franchise structure works to Harvey Norman’s benefit (Harvey Norman Limited).

While transparency on concentrate pricing is low, the ‘Coke System’ appears to be currently supporting all parties (Coca Cola Amatil Limited).

In our view, FCL has the best financial services model of its competitors as its loan book is largely funded by retail deposits, with limited wholesale funding (Futuris Corporation Limited).
When discussing IntC, such as ‘management processes, policies and practices’, ‘organisational and management structure’ and ‘strategy’, analysts take a neutral stance. These types of ICI tend to be used in explaining the company and its value creation processes:

Billabong’s management structure is centred on the geographic segments it competes in (Billabong International Limited).

SMS operates across three separate business lines: SMS Consulting, M&T Resources, & Technology Services (SMS Management & Technology Limited).

In FY03, CPU restructured management organisation, appointing managing directors for each geographic region of operation (Computershare Limited).

Although there are only 43 references to ‘corporate governance’, analysts have pointed out weaknesses in corporate governance practices five times, making it the IC subcategory with the second highest proportion of negative references. This indicates that analysts tend to be critical about corporate governance practices adopted by companies. Generally negative references to ‘corporate governance’ concern weaknesses in reporting and accountability, perhaps because they constitute an information constraint from analysts’ perspective:

In particular the measurement and recognition of both base and performance fees are still a relatively opaque area for most observers (Macquarie Group Ltd).

These problems exposed weaknesses in management reporting and accountability within the company (Aristocrat Leisure Ltd).

4.3. Time-orientation dimension of intellectual capital information

As Table 3 highlights, nearly half of all ICI is expressed in non-time-specific terms and the other half is divided between forward-looking and past-oriented statements.

<Insert Table 3 about here>

The significant proportion of past-oriented statements indicates that ICI is commonly used to explain the value realised by companies:
We believe the increase in ROC [Return on Capital] is the direct result of acquisitions combined with management’s ability to integrate new assets and drive returns from existing assets (Wesfarmers Limited).

Over the past five years, the BPL tie-up has delivered an average 10% return on capital for Henderson (Henderson Group Plc).

However, not all past-oriented ICI is used to communicate value realisation. In some instances, past performance of IC is explained by analysts as a basis for formulating future performance expectations:

The company has historically been strong in mid-west and Native American markets in the US, and will continue to build on this presence, as well as expanding their share of the Nevada market, which remains important (Aristocrat Leisure Limited).

The Australian franchise network generated sales of $3.53 billion in FY05 and we forecast it will have sales of $3.76 billion in FY06e, growth of 6.5% (Harvey Norman Limited).

In other instances, past investments in IC are mentioned in order to infer benefits to be expected in the future. Therefore, invariably some past-oriented IC references are linked to the communication of the future value creation in analyst reports:

Perpetual has mitigated key man risk with stock incentives for the asset management staff (Perpetual Limited).

We understand that, over the past two years, SYB management has been aiming to increase the amount of benchmarking and standardisation of ordering across SYB’s pathology labs (Healthscope Limited).

There are differences in the time-orientation of IC referred to in analyst reports across the three IC categories. The highest proportion of forward-looking references is found in relation to IntC (53 per cent) and least in relation to HumC (4 per cent). The converse is true for past-oriented IC references.

HumC subcategories are generally referred to either in past-oriented or non-time-specific terms. This reflects that when discussing information relating to employees, analysts tend to dwell on their past educational achievements and work experiences,
skills and capabilities they have already acquired, and the roles and responsibilities in their current and past positions:

A number of new senior executives have been employed, including Chris Roberts, who was an executive vice president of ResMed (Cochlear Limited).

Has extensive experience in the Australian gas market gained from a successful career in key commercial roles (Hastings Diversified Utilities Fund).

Mr de Alwis is a Past President of the National Pharmaceutical Services Association and Medicine Partnership of Australia (Sigma Pharmaceuticals Limited).

Employee-related information is primarily used in analyst reports to inform that employees are capable, have relevant work experience, educational and professional qualifications and skills, possibly in an attempt to build investor confidence in the abilities of the company’s employees and managers.

With respect to a company’s management team, there is more emphasis on their future contributions to the success of the company as evidenced by a significantly high proportion of forward-looking references in the ‘management team’ subcategory (38 per cent). For instance, analysts tend to link capabilities of the management team to the future firm performance:

The company’s strategy will be to enhance value, particularly revenue and profitability (including via acquisition), by utilising its strong management team and casino expertise (Crown Limited).

Since 2005, the division has delivered improved margins and margin growth, with the strong management team and clear strategic direction likely to result [in] a continued trend upward (Wesfarmers Limited).

Looking at the more frequently disclosed subcategories in the ExtC category, a low proportion of forward-looking expressions are observed for the ‘corporate image and reputation’, ‘financial relations’, ‘brands’, and ‘market share’ subcategories. IC references coded into these ExtC subcategories are mostly non-time-specific. The finding that most ExtC information is not directly analysed for future impact is surprising given that it can be more easily linked with future value creation. ExtC
information is generally used in analyst reports to discuss a company’s current position and relationships.

Information relating to ‘corporate image and reputation’ is generally non-time-specific as it describes how the company is currently perceived:

  Cochlear Limited is a worldwide leader in the manufacture and sale of cochlear implant systems used for the treatment of individuals with profound and severe hearing loss (Cochlear Limited).

The dominance of non-time-specific information in the ‘financial relations’ subcategory can be attributed to the majority of information coded into this subcategory being associated with the current shareholders and their respective shareholdings. Similarly, the ‘brands’ subcategory mainly contains references to the current position of the company’s brands and the ‘market share’ subcategory generally includes references to the company’s current market share.

  CCL currently owns the brand of Mount Franklin, Kirks, Deep Spring, L&P (NZ) and Pump (NZ only) (Coca Cola Amatil Limited).

  Campbells Cash & Carry has also been building a banner for its smaller retail outlets under the Lucky 7 brand with an expected 80 Lucky 7 stores to be operational by end of 2003 (Metcash Limited).

The only ExtC subcategory with a majority of forward-looking references is ‘favourable contracts, licensing and franchising agreements’. When an analyst report states that a company has entered into a new contract or an agreement with a third party, it can be implied that its benefits will accrue to the company in the future. Therefore, the majority of references in this subcategory are coded into the forward-looking category by default, unless referring to contracts and agreements entered into in the past.

In contrast to subcategories of ExtC and HumC, comparatively more IntC subcategories (e.g., ‘business model’, ‘management processes, policies and practices’, ‘strategy’, and ‘organisations and business expertise’) contain more forward-looking references than past-oriented or non-time-specific references. Of the references coded as ‘management processes, policies and practices’ 65 per cent are forward-looking; 46
percent of these references depict some form of link between management processes, policies and practices adopted by the company and future benefits in terms of enhanced operational or financial performance:

The manufacturing operations underwent significant restructuring aimed at improving delivery performance and product quality (Sims Metal Management Limited).

Management has embarked on a programme to improve the economic and production efficiency of its operations (Zenifex Limited).

The company is undertaking trials with most of the largest grocery suppliers in Australia and delivering improvements in logistics costs and level of on time delivery (Woolworths Limited).

Similarly, the majority of information relating to ‘organisational and business expertise’ is analysed in terms of future impact by analysts:

The asset management business would bolster APA’s asset management capabilities and complement the ownership of GasNet and Allgas (APA Group).

It is the breadth of the distribution network, as well as the technical know-how and delivery time, that helps to stem imports in greater quantity (Onesteel Limited).

Also, forward-looking references to the ‘business model’ subcategory, in general, convey future implications:

MDT offers a relatively low risk exposure to US retail property – the strong fundamentals of the community centre format, combined with the management skills of the top US owner/operator in the sub-sector, should provide income security (Macquarie DDR Trust).

Going forward, we expect lower growth by design as SMS shifts the model to higher-margin permanent-placement recruitment versus high-volume contractor recruitment (SMS Management & Technology Limited).

The overwhelming amount of forward-looking references to the ‘strategy’ subcategory is self-explanatory as strategy information by definition is forward-looking:
The strategy in the US for Aristocrat is to increase their presence and penetration into existing markets, take advantage of new markets opening, and increase the number of units on participation (Aristocrat Leisure Limited).

4.4. Two-way analysis between qualitative dimensions

Following Beattie, McInnes, and Fearnley, (2004) we conducted a two-way cross-type analyses between evidence, news-tenor and time orientation categories for a richer understanding of ICI use. Table 4 (Panel A) shows the results of a cross-tabulation between IC references in the news-tenor and evidence categories. This analysis highlights that ICI that is used discursively has a substantially higher proportion of positive attributions (64 per cent) compared to ICI containing numerical expressions (31 per cent). This, perhaps, suggests that ICI represented numerically is less amenable than that represented discursively to manipulations in constructing arguments to carry a favourable tenor. Nonetheless, results indicate that discursive ICI is not always positively biased.

Table 4 (Panel A)

Table 4 (Panel B) provides a cross-tabulation between the news-tenor and time-orientation categories. According to the table there is great similarity in the way positive and negative IC references are distributed between forward-looking and past-oriented categories. This indicates that analysts are indifferent in the use of positive and negative IC information in relation to their time-orientation.

The results of the cross-tabulation between time-orientation and evidence categories are shown in Table 4 (Panel C). The most important observation from this table is that when ICI is provided numerically it is more likely to be past-oriented than forward-looking. Nonetheless, non-time-specific references to IC dominate in all three evidence categories with visual depiction of IC being the most non-time-specific.

5. Summary, discussion and conclusions

The main purpose of this paper was to go beyond the investigation of types of ICI in analyst reports, which has been the focus of prior research, by providing an empirical understanding of how ICI is used by analysts in initiating coverage reports. This study utilised a multi-dimensional coding framework that captures qualitative dimensions of
ICI in analyst reports and quotes from analyst reports for a better understanding of this phenomenon.

Our results indicate that ICI is used discursively (non-numerical), numerically (both monetary and non-monetary), as well as visually. It was apparent that IC is used discursively in explaining the ‘value creation story’ of the company and in justifying analysts’ forecasts and estimates. This confirms that IC is part of the analysts’ mosaic of information described by Holland (2006). In addition, evidence was found of IC being used quantitatively to derive expectations about future growth rates, earnings and cash flows. Although preparers of IC information have been hesitant to translate the rhetoric about IC into measurables (Guthrie and Petty, 2000), our results highlight that users are explicit about it. Overall, the findings of this study imply that analysts are not as ambivalent as described in the literature in using IC information in conducting valuations and justifying decisions (e.g., Johanson, 2003).

Consistent with the analyst literature that indicates analysts are disproportionately resistant to ‘bad news’ (Fogarty and Rogers, 2005), our study finds that lack of IC or having comparatively less IC than other firms in the industry is rarely communicated by analysts. ICI is often used to show a firm in a positive light. It had been demonstrated in the literature that analysts work within an institutional framework that influences them and provides incentives to be optimistic in relation to the companies they analyse (Campbell and Slack, 2008; Fogarty and Rogers, 2005). Three key findings pertaining to the news-tenor of ICI highlight a possible optimism bias in analysts. First, analyst reports have a high level of positive IC references and minimal number of negative IC references. Second, there is a dominance of positive references to company management consistent with prior literature on analyst optimism. Third, there is an absence of direct criticism of company management among negative references. Similar observations were made by Campbell and Slack (2008) and Fogarty and Rogers (2005) when investigating analysts’ use of non-financial information, in general. At the same time, our results indicate that when ICI is provided numerically, analysts’ ability to favourably depict the firm reduces. Also, numerical ICI is more often backward-looking dwelling on status quo. These findings not only support the contention of analyst optimism espoused in prior literature, but also provide evidence of ICI being used to optimistically portray companies and their
investment potential. Users of analyst reports and researchers interested in analysts’ work products should evaluate them with this understanding.

It was noted that analysts provide a more impartial and critical assessment of corporate governance practices of firms when such information is presented. This highlights governance failures and analysts’ reluctance to tolerate them, despite the need to manage their relationship with company management (Fogarty and Rogers, 2005). Perhaps contemporary corporate collapses, some of which relate to governance failures, have alerted analysts to be vigilant of governance discrepancies.

Results on the time-orientation of ICI highlight that IC is not only used by analysts to communicate ‘value creation’ (through forward-looking IC references), but also ‘value realisation’ (through past-oriented IC references). As ICI relates to a firm’s capacity to create and deliver value now and in the future (Boedker, et al., 2005) and analysts’ ought to be forward-looking with their forecasts and recommendations, one might expect to see more forward-looking ICI. In support of this contention our results can be compared with that of Fogarty and Rogers (2005), who found that 49 per cent of all the sentences in analyst reports were past-oriented. Since we only found 29 per cent of ICI oriented in the past, it can be argued that in comparison to other content in analyst reports ICI is less oriented in the past. However, it can be argued that communication of ‘value realisation’ in analyst reports is also important for several reasons. First, it helps to convey a sense of stability of the company. Second, future expectations can be formed based on the past performances of IC. Third, firms’ history of investments in IC indicates management priorities and their commitment in relation to future investments in IC. In this regard, our results suggest that past-oriented as well as non-time-specific IC information occupies an important place in an analyst report in the overall communication of future value creation. Sometimes past performance of firm’s IC and firm’s past investments in IC is linked to future expectations and future ‘value creation’ – hence their retrospectivity in relation to HumC.

The results of this study highlight a clear variation in how information relating to the three main IC categories is used. For instance, ExtC information is more numerical (42%), less positive (48%) and less forward-looking (26%); IntC information is less numerical (8%), more forward-looking (53%) and less past-oriented (15%); and
HumC information is more positive (68%), less forward-looking (4%) and more past-oriented (39%) compared to each other. The high proportion of numerical expressions in the ExtC category may suggest that ExtC is relatively easily measurable and capable of being incorporated into valuations compared to HumC and IntC. Nonetheless, it is surprising that ExtC is the least future oriented information category. The high level of forward-looking IntC references highlights that analysts often appreciate the impact of IntC on future firm value despite the importance of providing such information has been downplayed by companies (Striukova, Unerman, and Guthrie, 2008). However, the difficulty of quantifying the impact of IntC on firm value is reinforced by our results. Consistent with prior research, human capital – dominated by references to company management – is portrayed mainly positively by analysts. Nonetheless, these references predominantly being present or past-oriented can be interpreted with reference to work such as Almqvist and Henningsson (2009) and Holland and Johanson (2003). They argue that an important aspect of analysts’ work is to form a judgement as to the quality of management which is useful for placing a firms’ IC in context and evaluating current strategy.

Analysis of ICI by the three dimensions reveals interesting insights on the use of various IC subcategories in analysts’ work. Although future research is necessary to identify patterns in the purposes for which each IC subcategory is used, our analysis provide some evidence on the need to theorise IC through a ‘performative’ paradigm. Mouritsen (2006) argues that according to the performative approach, IC is involved in organisational practices in detailed and multiple ways. Based on this point of view, IC is a boundary object, which can be bent to situations and works in unpredictable ways. Accordingly, there is no one fundamental way in which IC is connected to value creation and organisational results; and hence the form and function of IC cannot be identified a priori. Consistent with this theory of IC, we find that a given subcategory of ICI can take multiple forms and perform multiple functions. Hence, its utility in analysts work is varied and nebulous. A more grounded approach is necessary to draw inferences on how each different subcategory of ICI works in tandem.

The findings of this study need to be interpreted subject to several limitations, some of which are common to studies utilising content analysis, while others are specific to
this study. Human involvement in content analysis can introduce error and subjectivity into the data generating process. Although a level of subjectivity cannot be fully eliminated when human coders are involved, reliability coefficients calculated for this study establish a satisfactory level of reliability.

Concerning the limitation specific to this study, it uses a small sample size that constrains the generalisability of findings. Also, a sampling validity threat could exist due to the limited number of stockbroking firms represented in the sample. However, the sample comprises analyst reports issued by some of the largest stockbroking firms in Australia. Also, analyst reports may not include all ICI considered by analysts and to the extent that there are important differences between ICI considered and communicated in analyst reports, a validity threat exists. The IC categorisation scheme used in this study may not capture all ICI referred to in analyst reports, and as a result the inference making is driven by the researchers’ conception of IC. As the study used its own IC categorisation scheme, cross-comparability of the findings of this study is limited. Due to some of these limitations, we make no claim of generalisibility; it only offers a tentative interpretation of the data to inform how ICI is used by analysts in the sampled analyst reports. Hence, future studies can investigate these phenomena using different methods to demonstrate whether the insights from this study hold.

The findings of this study have broader policy implications in terms of improving corporate reporting to analysts (and possibly other key user constituencies). In the light of the findings reported in this paper, firms may want to re-evaluate their current IC reporting practices and the role of investor relations in making firm’s IC related activities transparent. Knowing how different types of ICI are used by analysts will enable firms to align IC reporting with the ICI needs of users and provide ICI in a manner comprehensible to analysts. Similarly, regulators face challenges in setting non-financial (including IC) reporting requirements due to insufficient knowledge of user requirements. Our empirical findings should be of interest to regulators for preparing guidelines for voluntary reporting of IC and updating/amending existing IC frameworks and guidelines.
References


Ahuvia, A., (2001). Traditional, interpretive, and reception based content analyses: improving the ability of content analysis to address issues of pragmatic and theoretical concern. *Social Indicators Research, 54*(2), 139-172.


Orens, R., Lybaert, N., (2007). Does the financial analysts' usage of non-financial information influence the analysts' forecast accuracy? Some evidence from the


### Table 1: Comparison of quantitative and qualitative content analysis

<table>
<thead>
<tr>
<th></th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of research</strong></td>
<td>Deductive – testing hypotheses</td>
<td>Inductive – examining topics and themes to draw inferences</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>Counting manifest textual elements (ignores syntactical and semantical</td>
<td>Exploring meanings underlying the texts</td>
</tr>
<tr>
<td></td>
<td>properties)</td>
<td></td>
</tr>
<tr>
<td><strong>Sampling</strong></td>
<td>Random sampling or other probabilistic approaches so as to ensure the</td>
<td>Purposive selection of the sample in order to inform the research questions</td>
</tr>
<tr>
<td></td>
<td>validity of statistical inference</td>
<td>being investigated.</td>
</tr>
<tr>
<td><strong>Results presented</strong></td>
<td>Numbers that can be manipulated using statistical methods.</td>
<td>Descriptions or typologies and expressions from subjects reflecting their</td>
</tr>
<tr>
<td></td>
<td></td>
<td>view.</td>
</tr>
</tbody>
</table>

*Source: adapted from Zhang and Wildemuth (2009)*

### Table 2: Reliability coefficients of inter-coder reliability

<table>
<thead>
<tr>
<th>Coding level</th>
<th>Coding units</th>
<th>Proportional agreement</th>
<th>Krippendorff’s Alpha</th>
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</thead>
<tbody>
<tr>
<td>Sentence</td>
<td>378</td>
<td>97.4%</td>
<td>0.794</td>
</tr>
<tr>
<td>Topic</td>
<td>21</td>
<td>95.2%</td>
<td>0.938</td>
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<tr>
<td>Evidence</td>
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<td>95.2%</td>
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</tr>
<tr>
<td>News-tenor</td>
<td>21</td>
<td>95.2%</td>
<td>0.880</td>
</tr>
<tr>
<td>Time-orientation</td>
<td>21</td>
<td>90.5%</td>
<td>0.851</td>
</tr>
</tbody>
</table>
Table 3: General and specific observations

<table>
<thead>
<tr>
<th>Evidence categories</th>
<th>Total</th>
<th>Visual</th>
<th>Discursive (non-numerical)</th>
<th>Numerical (non-monetary)</th>
<th>Numerical (monetary)</th>
<th>News-tenor categories</th>
<th>Time-orientation categories</th>
</tr>
</thead>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Positive</td>
<td>Neutral</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>776 (48%)</td>
<td>761 (47%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>906 (68%)</td>
<td>406 (31%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>319 (51%)</td>
<td>271 (43%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2001 (56%)</td>
<td>1438 (40%)</td>
</tr>
</tbody>
</table>

Panel A – IC categories

| External capital  | 1607   | 65 (4%) | 866 (54%) | 616 (38%) | 60 (4%) | 776 (48%) | 761 (47%) | 70 (4%) | 421 (26%) | 807 (50%) | 379 (24%) |
| Human capital     | 1329   | 1 (0%)  | 998 (75%) | 319 (24%) | 11 (1%) | 906 (68%) | 406 (31%) | 17 (1%) | 56 (4%)   | 758 (57%) | 515 (39%) |
| Internal capital  | 631    | 34 (5%) | 534 (85%) | 49 (8%)   | 14 (2%) | 319 (51%) | 271 (43%) | 41 (6%) | 332 (53%) | 202 (32%) | 97 (15%)  |
| Total             | 3567   | 100 (3%)| 2398 (67%)| 984 (28%)| 85 (2%) | 2001 (56%)| 1438 (40%)| 128 (4%)| 809 (23%)| 1767 (49%)| 991 (28%) |

Panel B - selected IC subcategories*

| External capital   |        |        |                             |                          |                      | Positive               | Neutral | Negative   | Total | Forward-looking | Non-time-specific | Past-oriented |
|--------------------|--------|--------|-----------------------------|--------------------------|                      | 776 (48%)              | 761 (47%) | 70 (4%)   | 421 (26%) | 807 (50%) | 379 (24%) |
| Brands             | 272    | 14 (5%)| 132 (49%) | 125 (46%) | 1 (0%) | 124 (46%) | 193 (71%) | 15 (6%) | 53 (19%)   | 146 (54%) | 73 (27%)  |
| Business collaborations | 293  | 1 (0%) | 194 (66%) | 59 (20%) | 39 (13%) | 172 (59%) | 114 (39%) | 7 (2%)   | 100 (34%) | 72 (25%)  | 121 (41%) |
| Corporate image & reputation | 125  | 1 (1%) | 77 (62%) | 41 (33%) | 6 (5%) | 118 (94%) | 3 (2%)   | 4 (3%)   | 13 (10%) | 87 (70%)  | 25 (20%)  |
| Customers (other)  | 223    | 10 (4%)| 156 (70%) | 55 (25%) | 2 (1%) | 109 (49%) | 109 (49%) | 5 (2%)   | 72 (32%) | 108 (48%) | 43 (19%)  |
| Distribution       | 96     | 1 (1%) | 77 (80%) | 18 (19%) | 0 (0%) | 63 (66%) | 29 (30%) | 4 (4%)   | 32 (33%) | 51 (53%)  | 13 (14%)  |
| Favourable contracts, licensing … | 122  | 0 (0%) | 83 (68%) | 30 (25%) | 9 (7%) | 70 (57%) | 42 (34%) | 10 (8%)  | 48 (39%) | 35 (29%)  | 39 (32%)  |
| Financial relations | 196   | 2 (1%) | 45 (23%) | 148 (76%)| 1 (1%) | 35 (18%) | 158 (81%)| 3 (2%)   | 25 (13%) | 149 (76%)| 22 (11%)  |
| Market share       | 235    | 36 (15%)| 62 (26%) | 135 (57%)| 2 (1%) | 109 (46%)| 105 (45%)| 21 (9%)  | 60 (26%) | 143 (61%)| 32 (14%)  |

| Human capital   |        |        |                             |                          |                      | 776 (48%)              | 761 (47%) | 70 (4%)   | 421 (26%) | 807 (50%) | 379 (24%) |
| Educational qualifications | 81  | 0 (0%) | 81 (100%)| 0 (0%)  | 0 (0%) | 81 (100%)| 0 (0%)  | 0 (0%)   | 0 (0%)   | 78 (96%)  | 3 (4%)   |
| Employees (other) | 402   | 1 (0%) | 302 (75%)| 97 (24%)| 2 (0%) | 57 (14%) | 341 (85%)| 4 (1%)   | 19 (5%)  | 289 (72%)| 94 (23%)  |

40
<table>
<thead>
<tr>
<th>Internal capital</th>
<th>55</th>
<th>0 (0%)</th>
<th>54 (98%)</th>
<th>1 (2%)</th>
<th>0 (0%)</th>
<th>45 (82%)</th>
<th>2 (4%)</th>
<th>8 (15%)</th>
<th>21 (38%)</th>
<th>10 (18%)</th>
<th>24 (44%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management team</td>
<td>703</td>
<td>0 (0%)</td>
<td>494 (70%)</td>
<td>207 (29%)</td>
<td>2 (0%)</td>
<td>657 (93%)</td>
<td>42 (6%)</td>
<td>4 (1%)</td>
<td>1 (0%)</td>
<td>338 (48%)</td>
<td>364 (52%)</td>
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<tr>
<td>Work experience</td>
<td>79</td>
<td>3 (4%)</td>
<td>75 (95%)</td>
<td>1 (1%)</td>
<td>0 (0%)</td>
<td>49 (62%)</td>
<td>26 (33%)</td>
<td>4 (5%)</td>
<td>40 (51%)</td>
<td>32 (41%)</td>
<td>7 (9%)</td>
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<tr>
<td>Business model</td>
<td>130</td>
<td>4 (3%)</td>
<td>85 (65%)</td>
<td>33 (25%)</td>
<td>8 (6%)</td>
<td>49 (38%)</td>
<td>75 (58%)</td>
<td>6 (5%)</td>
<td>85 (65%)</td>
<td>25 (19%)</td>
<td>20 (15%)</td>
</tr>
<tr>
<td>Corporate governance</td>
<td>43</td>
<td>0 (0%)</td>
<td>42 (98%)</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>21 (49%)</td>
<td>17 (40%)</td>
<td>5 (12%)</td>
<td>16 (37%)</td>
<td>21 (49%)</td>
<td>6 (14%)</td>
</tr>
<tr>
<td>Management processes, policies …</td>
<td>88</td>
<td>23 (26%)</td>
<td>64 (73%)</td>
<td>1 (1%)</td>
<td>0 (0%)</td>
<td>16 (18%)</td>
<td>65 (74%)</td>
<td>7 (8%)</td>
<td>17 (19%)</td>
<td>63 (72%)</td>
<td>8 (9%)</td>
</tr>
<tr>
<td>Organisational &amp; business expertise</td>
<td>144</td>
<td>2 (1%)</td>
<td>139 (97%)</td>
<td>2 (1%)</td>
<td>1 (1%)</td>
<td>56 (39%)</td>
<td>76 (53%)</td>
<td>12 (8%)</td>
<td>110 (76%)</td>
<td>16 (11%)</td>
<td>18 (13%)</td>
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<tr>
<td>Organisational &amp; management structure</td>
<td>58</td>
<td>0 (0%)</td>
<td>57 (98%)</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>54 (93%)</td>
<td>0 (0%)</td>
<td>4 (7%)</td>
<td>25 (43%)</td>
<td>17 (29%)</td>
<td>16 (28%)</td>
</tr>
</tbody>
</table>

*Only the IC subcategories representing at least 1 per cent of total IC references are included in this table.*
Table 4: Cross-tabulations between evidence, news-tenor and time-orientation categories

<table>
<thead>
<tr>
<th>Panel A</th>
<th>Visual</th>
<th>Numerical (monetary and non-monetary)</th>
<th>Discursive (non-numerical)</th>
<th>Total</th>
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<tbody>
<tr>
<td>Positive</td>
<td>8 (8%)</td>
<td>449 (42%)</td>
<td>1544 (64%)</td>
<td>2001 (56%)</td>
</tr>
<tr>
<td>Neutral</td>
<td>92 (92%)</td>
<td>598 (56%)</td>
<td>748 (31%)</td>
<td>1438 (40%)</td>
</tr>
<tr>
<td>Negative</td>
<td>0 (0%)</td>
<td>22 (2%)</td>
<td>106 (4%)</td>
<td>128 (4%)</td>
</tr>
<tr>
<td>Total IC</td>
<td>100 (100%)</td>
<td>1069 (100%)</td>
<td>2398 (100%)</td>
<td>3567 (100%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B</th>
<th>Forward-looking</th>
<th>Non-time-specific</th>
<th>Past-oriented</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>526 (65%)</td>
<td>816 (46%)</td>
<td>659 (66%)</td>
<td>2001 (56%)</td>
</tr>
<tr>
<td>Neutral</td>
<td>238 (29%)</td>
<td>912 (52%)</td>
<td>288 (29%)</td>
<td>1438 (40%)</td>
</tr>
<tr>
<td>Negative</td>
<td>45 (6%)</td>
<td>39 (2%)</td>
<td>44 (4%)</td>
<td>128 (4%)</td>
</tr>
<tr>
<td>Total IC</td>
<td>809 (100%)</td>
<td>1767 (100%)</td>
<td>991 (100%)</td>
<td>3567 (100%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel C</th>
<th>Visual</th>
<th>Numerical (monetary and non-monetary)</th>
<th>Discursive (non-numerical)</th>
<th>Total</th>
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<tbody>
<tr>
<td>Forward-looking</td>
<td>14 (14%)</td>
<td>145 (13%)</td>
<td>650 (27%)</td>
<td>809 (23%)</td>
</tr>
<tr>
<td>Non-time-specific</td>
<td>79 (79%)</td>
<td>564 (53%)</td>
<td>1124 (47%)</td>
<td>1767 (49%)</td>
</tr>
<tr>
<td>Past-oriented</td>
<td>7 (7%)</td>
<td>360 (34%)</td>
<td>624 (26%)</td>
<td>991 (28%)</td>
</tr>
<tr>
<td>Total IC</td>
<td>100 (100%)</td>
<td>1069 (100%)</td>
<td>2398 (100%)</td>
<td>3567 (100%)</td>
</tr>
</tbody>
</table>

Figure 1: Main dimensions of investigation
Figure 2: Changes in market share over time

Figure 3: Market share relative to competitors
Social capital, in contrast to IC, only concerns resources associated with the network of relationships possessed by an entity or individuals of that entity (Nahapiet and Ghoshal, 1998). Although social capital can create certain intellectual capital, we adopt the view that the latter is a broader concept than the former.

Initiating coverage analyst reports are written by sell-side analysts when they commence covering a particular company or after a considerable lapse of time since the last coverage.

News-tenor refers to the pro- or con-representation of the subject matter (Kassarjian, 1977). However, Kassarjian (1977, p.13) uses the term ‘direction’ to refer to what we refer to as news-tenor.

For example, a word is followed by a space, a sentence is followed by a full stop and a paragraph is set off by indentation. However, there are no such boundaries visible between text units.

Prior to developing an IC categorisation scheme for this study a pre-sample of analyst reports were coded using Guthrie and Petty’s (2000) IC categorisation scheme, which has been widely used in IC research. It was found that IC communicated in analyst reports could not be exhaustively and mutually exclusively categorised into those categories. Hence, it was decided to refine Guthrie and Petty’s (2000) IC categorisation scheme by conducting an extensive review of the literature. This review resulted in a list of over 320 IC concepts and indicators. New IC subcategories were created or their boundaries were expanded when the existing IC subcategories in Guthrie and Petty’s (2000) categorisation scheme were inadequate to accommodate some of these IC concepts and indicators. Further changes were made to the IC categorisation scheme so developed throughout pre-testing before deriving the final version.

Boyatzis (1998, p. 53) recommended the following five elements to be present in good coding instrument used in content analysis:

- A label, comprising category name and code.
- A definition of what the category concerns (i.e., the characteristics or issue constituting the theme).
- A description of how to know when the category occurs (i.e., how to ‘flag’ a category).
- A description of any qualification or exclusion to the identification of the category.
- Examples, both positive and negative, to eliminate possible confusion when looking for a category.

The inter-coder reliability measures were calculated for sentence/visual coding and for the four dimensions. Reliability of coding for the four dimensions was tested on the sentences/visuals that were mutually agreed upon by the two coders as containing at least one IC text unit/information item, at the sentence coding stage. Of the 378 randomly elected sentences, both coders agreed on 21 IC related text units/information items that were further coded according to the 4 dimensions.

There is no widely held acceptable threshold for any of the reliability statistics (Holsti, 1969; Lombard, Snyder-Duch, and Bracken, 2002). Guthrie and Mathews (1985) suggest that 80 per cent agreement above chance is acceptable when coding social and environmental disclosures in annual reports. Neuendorf (2002) suggests that coefficients of 0.90 or greater are acceptable for any reliability measure while 0.80 or greater are acceptable in most situations. Lombard *et al.* (2002) bring down the bar to 0.70 for exploratory research. Krippendorff (2004b, p.429) states that while it is customary to require an alpha of 0.8, tentative conclusions are still acceptable when $\alpha \geq .667$. Krippendorff (2004a, 2004b) warns that the decision of an acceptable threshold must be made after envisaging the costs of drawing invalid conclusions.
Improving the review process

With the aim to improve the academic profile of the EAA annual congresses, the SSC has been implementing new changes during the last few years. These range from the requirement of full papers only to the introduction of discussants for papers of particular interest. The review process has also been improved. Not only has the SC gradually been increased up to 70 members, including the SSC members, but the scoring methodology has also been refined and included on this website (see below). Moreover, the submission categories have been gradually revised to obtain a clearer picture of the topics and research methods. In our view this will not only improve the review process but also the organisation of the sessions.

Submission categories

In order to increase the dialogue amongst various research perspectives, and to avoid the creation of dogmatic paradigms, the SSC has introduced a new submission procedure that captures both the topic and method of a submitted paper. In this way, sessions could be organised according to topics but each author/paper will carry a ‘key’ identifying the research method/perspective adopted. This has implied that some categories (e.g. Analytical/Modelling, History, Interdisciplinary/Critical Perspective, Market based) are now considered methodological rather than topical categories. This will facilitate the work of the SSC in preparing sessions and will make it possible to combine in a session papers in different ways (e.g. keeping homogeneity of methods or mixing them as they deal with the same topic). The result will hopefully be interesting as comparison of approaches is now possible.

Consequently authors are invited to submit papers to any of the categories indicated below:

A) Subject/Topic of the paper submitted:

AU = Auditing
Submissions in the area of auditing and assurance.

ED = Accounting Education
Submissions dealing with any educational aspects of accounting, for example related to professional accountants, students, and pupils, but also institutions of education.

FA = Financial Analysis
Submissions in the area of financial accounting which focus on the users; it uses a set of methods to extract information from financial statements and other sources information and relate it to value of equity and debt investment and to interests of other stakeholders.

FR = Financial Reporting
Submission in the area of financial accounting which focus on the preparers; it analyses the choices and methods concerning the preparation of financial statements, taking into account firm characteristics, accounting standards, as well as institutions.

GV = Accounting and Governance
Submissions which relate to the interface between corporate governance and accounting.

IS = Accounting and Information Systems
Submissions in the area of the interface between accounting, information technology and systems.

MA = Management Accounting
Submissions in the area of management accounting and control systems.

PS = Public Sector Accounting
Submissions on accounting in the public and voluntary sectors.
**SE = Social and Environmental Accounting**
Submissions dealing with all aspects of social and environmental accounting.

**TX = Taxation**
Submissions on the subject of taxation.

**B) Methodology/perspective** of the paper submitted:

**AM = Analytical/Modelling**
Submissions which discuss the definitions of and relationships among concepts; economic modelling is often used.

**CF = Case/Field Study**
Submissions which utilise the case study method or conduct field study research through various methodologies (e.g. ethnographies).

**EA = Empirical Archival**
Submissions which involve the testing of a statistical hypothesis to answer the research question(s); a data base is normally used.

**EX = Experimental**
Submissions which utilise an experimental design to address the research question(s).

**HI = History**
Submissions which adopt an historical perspective, and investigate historical issues of accounting thought and practices.

**IC = Interdisciplinary/Critical**
Submissions that draw on more than one discipline, ideally exploring their interrelations, or that draw on any of the various strands of critical theory.

**MB = Market Based**
Submissions which examine the relation between financial statement and other information and capital markets, including equity and debt markets.

**SU = Survey**
Submissions which utilise a survey methodology to address the research question(s).

**Types of sessions**
Regarding the 2011 conference, there will three types of sessions:

1. **Parallel Session with Discussant (PSD)**, where selected relevant papers will be individually discussed by experts in the area (2 papers in each session);
2. **Parallel Session (PS)**, that will include 3 papers in a normal session; and,
3. **Research Forum Session (RFS)**, where 5 less-developed papers will be briefly presented in each session.

The decision to be included in each of these sessions will be made by the SSC taking into account the scores obtained in the review process.

**Multiple submissions**
As a consolidated EAA policy, each individual is limited to one personal appearance on the programme as a presenting author. This policy precludes acceptance of papers for more than one presentation, but a presenter can always be a non-presenting co-author on additional papers.

**Submission rules**
Authors who want to submit a paper must be EAA members in the year of the congress for which they submit. If you are not a member, you will be asked to subscribe for membership 2011 before being allowed to submit.

Authors are invited to submit full papers. The **deadline** for the submission of papers is **1 December 2010**.

A **full paper** is a complete scholarly research report that could reasonably be submitted for publication in a public working paper data base such as SSRN.

Papers will be subject to a **double-blind review process by the Scientific Committee**. So please do NOT include neither a cover page with your submission, nor any type of information that can identify you (no name, no address, no e-mail address, no acknowledgments or thanks). Information typically provided on a cover page will be entered on the on-line submission form.

Papers can only be submitted **electronically** via this website (please see the page “submission” and follow the instructions on the on-line submission pages). Abstracts will be included in the congress book, so they should not exceed 1,500 characters.

Papers received by postal mail, fax or in writing will not be considered.

Papers should be submitted in **English**.

**Confirmation** of acceptance or rejection by the SSC will be given after 10 February 2011 and mailed to the corresponding address of the presenting author (unless another author is selected as a contact person), together with instructions for PSD, PS or RF.
The presenters of an accepted paper must register as a participant for the congress before 28 February 2011.

Please take into account that once a paper is included in the programme, the author should present it the conference or officially notify the organizers of its withdrawal.

**Review instructions**

To 'anchor' the grading of the papers to be presented at the congress, the following assumption will be made: be ready for submission to a journal like European Accounting Review (EAR). If so they will score a 4 in the scoring system outlined below. As the 4 is the reference level we now give more information on what 4 would represent for papers submitted, but first keep in mind the definition of full papers provided above.

To achieve a 4, a full paper defined submitted should:

a) present a coherent argument
b) address a topic of research interest and importance,
c) display awareness of previous work in the area,
d) outline a valid research approach,
e) include evidence and/or arguments which, although possibly incomplete, appear reliable, and
f) indicate awareness of the work which may still be required.

Based on the 'anchor', the scoring system is:

6 → The paper has very good chances in the review process of a good accounting journal (e.g. EAR).
5 → The paper has good chances in the review process of a good accounting journal (e.g. EAR).
4 → The paper could reasonably be submitted to a journal like EAR.
3 → Not yet ready for submission.
2 → Represents initial work on a potentially viable project, but is not likely to be ready for submission for some time.
1 → The submitted work does not, as yet, provide evidence of a viable research project.

* Evidence of refereeing

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* Evidence that year of pub was 2011

EUROPEAN ACCOUNTING ASSOCIATION
ROME - SIENA 2011
34TH ANNUAL CONGRESS ROME 20-22 APRIL
DOCTORAL COLLOQUIUM SIENA 16-19 APRIL

* Evidence of name, date and location of conference

*Front cover of proceedings

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DI SIENA

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www.tlumphgroup.it
info@trumphgroup.it
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# EAA Committees

## EAA Management Committee 2010 - 2011

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<thead>
<tr>
<th>Position</th>
<th>Name</th>
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<tr>
<td>President</td>
<td>Aileen PIERCE</td>
</tr>
<tr>
<td>President-Elect</td>
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<tr>
<td>Chair of Prospective Congress 2011</td>
<td>Angelo RICCARONI</td>
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<tr>
<td>Chair of Prospective Congress 2012</td>
<td>Giovanni RORI</td>
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<td>Joseph GASSEN</td>
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<td>Peter MARTINSON</td>
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<td>Stuart MILNEY</td>
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## Board 2010 - 2011

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<td>President</td>
<td>Aileen PIERCE</td>
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<tr>
<td>President-Elect</td>
<td>Begona GIBER</td>
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<tr>
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<tr>
<td>Congress Chair 2012</td>
<td>Alexander VALENTOVIC</td>
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## National Representatives

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<tr>
<td>Austria</td>
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<td>Axel HALLER</td>
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<td>Daniel DYON</td>
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<tr>
<td>United Kingdom</td>
<td>Christopher HUMPHREY</td>
</tr>
</tbody>
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## Regions

- Asia: Akhilesh NAGULI
- Australia / New Zealand: Ann TARTICA
- North America: Anthony DOUGY

## Chairs of EAA Committees & Editors of EAA Journals

- Interim Chair Publications Committee: Ann JOHNSON
- Chair Conference Committee: Frans MARTINHAN
- Chair Scientific Committee: Henrik STOLFRI
- Chair Financial Reporting Standards Committee (FRS): Peter WALTON
- Doctoral Colloquium Co-Chairs: Jack MOULDER, Ulf REES
- European Accounting Review (EAR) Editor: Siljander KARMA, Lisa EVANS

## EAA Presidents 1978 - 2011

- 1978: A.G. HOPWOOD
- 1979: W.B. VON COLBE
- 1980: J.L. BOURD
- 1985: F. FERRERA
- 1987: B. PROVST
- 1989: D. DRILL
- 1992: A. ZÜND
- 1999: J.R. GILLET
- 1997: L.E. JOHANSSON
- 1999: A.D. HOPWOOD
- 1998: R. TELLER
- 1999: H. FORST
- 1990: L. FAUVET
- 1991: H. SCHULZER
- 1992: L. CARRANO
- 1993: R. MAJAR
- 1994: G. GALASSI
- 1995: J. SAMUEL
- 1995: A. KINSBERG
- 1997: A. WASSERMANNER
- 1998: C. REYN
- 1999: G. EICHER
- 2000: D. ORDEHELDE
- 2001: W. BOLLINGER
- 2001: G. VENERIS
- 2002: J. ELLING
- 2003: J.A. SCHOLZ
- 2004: B. HIRAL
- 2006: G. OLSON
- 2007: J. CHRISTENSEN
- 2008: J. CHRISTENSEN

---

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LOCATIONS OF EAA CONGRESSES 1978 - 2011

1978
Paris (France)

1979
Köln (Germany)

1980
Amsterdam (the Netherlands)

1981
Barcelona (Spain)

1982
Aarhus (Denmark)

1983
Glasgow (United Kingdom)

1984
St. Gallen (Switzerland)

1985
Brussels (Belgium)

1986
Stockholm (Sweden)

1987
London (United Kingdom)

1988
Nice (France)

1989
Strasbourg (France) Chair: Peter Honuth

1990
Budapest (Hungary) Chair: Lajos Faluvég

1991
Maastricht (the Netherlands) Chair: Wim Schreuder

1992
Madrid (Spain) Chair: Leandro Carballo

1993
Turku (Finland) Chair: Peetu Pihlanto

1994
Venice (Italy) Chair: Giuseppe Marcon

1995
Birmingham (United Kingdom) Chair: R.H. Jones

1996
Bergen (Norway) Chair: Anne Vinterbi

1997
Graz (Austria) Chair: Alfred Wagnerhofer

1998
Antwerp (Belgium) Chair: Willy Theunisse

1999
Bordeaux (France) Chair: Serge Evrard

2000
Munich (Germany) Chair: Wolfgang Ballwasser

2001
Athens (Greece) Chair: George Venira

2002
Copenhagen (Denmark) Chair: Anne Luft

2003
Seville (Spain) Chair: Guilermo Sierra

2004
Prague (Czech Republic) Chair: Bohumil Kral

2005
Goteborg (Sweden) Chair: Olof Olsson

2006
Dublin (Ireland) Chair: Aileen Pearce

2007
Lisbon (Portugal) Chair: Carlos Baptista da Costa

2008
Rotterdam (the Netherlands) Chair: Frans Hofmann

2009
Tampere (Finland) Chair: Salmi Nils

2010
Istanbul (Turkey) Chair: Recep Pecanm

2011
Rome (Italy) Chair: Angelo Riccaboni - Deputy Chair: Giovanni Forni

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Chris EMANUEL, Glasgow University
Francesco FANO, London Business School
Johann GASSNER, Humboldt University Berlin
Igor GONCHAROV, WU - Otto Beisheim School of Management
Matthias HALL, London School of Economics
Joerg Markus HITZ, Goettingen University
Ann HODGSON, Queensland University
Christian HOFFMANN, University of Mannheim
Joana HORTON, Exeter University
Helena ISSING, BCLT
Kim ITTÖNEN, University of Vaasa
Thomas JANUHAN, ESSEC Business School
Sylvie JORDAN, London School of Economics
Li KAIS, Tampere University
Benoit KEFOULIE, University of Windsor
Winfried KOOS, Lancaster University
Christopher KOCK, University of Mannheim
Arne treff KÖHLER, University of Duisburg-Essen
Caroline LAMBERT, HEC Paris
Cássia LARRIBA-GONZALEZ, Burgos University

European Accounting Association • 58th Annual Congress • Rome 26-28 April • Programme and Collected Abstracts
Cédric LESAGE, HEC Paris
Christian LEUZ, University of Chicago
Gilad LIVNE, London City University
Alan LOWE, Aston University
Marta MACIAS, University Carlos III Madrid
Habib MAHAMA, Australian National University
Zerni MIKKO, University of Vaasa
Araceli MORA, Valencia University
Riccardo MUSSARI, University of Siena
David NARÁNJO, University Pablo Olavide Seville
Andreas OESTREICHER, University of Göttingen
Erik PEEK, Erasmus University Rotterdam
Jukka PELLINEN, University of Jyväskyla
Fernando PENALVA, IESE Business School
Paolo PEREGO, Erasmus University Rotterdam
Charles PIOT, Grenoble II University
François-Régis PUYOU, Audencia - Nantes School of Management
Reiner QUICK, Darmstadt Technical University
Bernard RAFFOURNIER, HEC Geneva
Carlos RAMIREZ, HEC Paris
Joao RIBEIRO, University of Porto
Carlo SALVATO, Bocconi University
Massimo SARGIACOMO, University of Pescara
Simona SCARPARO, Warwick University
Caren SCHELLEMAN, Maastricht University
Ulf SCHILLER, Bern University
Barbara SCHONDEUBE PIRCHEGGER, University of Magdeburg
Riccardo SILVI, University of Bologna
Can SIMGA-MUGAN, Middle East Technical University
Kenth SKOGSVIK, Stockholm School of Economics
Tasheen SOHAIL, IE Business School
Jack STECHER, Carnegie Mellon University
Ian THOMSON, University of Strathclyde
Sof THRANE, Copenhagen Business School
Irem TUNA, London Business School
Stuart TURLEY, Manchester University
Jeffrey UNERMAN, Manchester Business School
Juhani VAIVIO, Aalto University School of Economics
Joost VAN BUUREN, Nijenrode University
Heidi VAN DER BAUWHEDE, Catholic University of Leuven
Ann VANSTRAELEN, Maastricht University
Stefano ZAMBON, University of Ferrara
Luca ZAN, University of Bologna
OPENING SESSION

Wednesday - April 20, 2011
Auditorium Parco della Musica - Sala Santa Cecilia

REGISTRATION 11:00 - 19:30

WELCOME ADDRESS 14:30 - 15:00
Welcoming and initial speech
Maximino Egidi, LUISS Rector
Angelo Riccaboni, Congress Chair; Rector of the University of Siena
Alun Pearce, EAA President, University College Dublin

OPENING SESSION 1 16:00 - 16:30
Coming out of financial crisis: the contribution of, and opportunities for, accounting research
Chair
Giovanni Foni, Congress Deputy Chair; LUISS Guido Carli
Speakers
Carlo Comporti, Acting Secretary General of ESMA
Luigi Quicchio, CEO of Wind
Irving Laplsey, University of Edinburgh Business School
Joshua Ronen, Stern School of Business, NYU

OPENING SESSION 2 16:30 - 18:00
Managing (within) the academic accounting environment: The sustainability of an international profession
Chair
Christopher Humphrey, Manchester Business School
Speakers
Yves Gardinon, Université Laval
James Guthrie, Bologna University and Macquarie University
Wendy Mallett, NRC
Martin Messner, University of Innsbruck
Hugh Wilmott, Cardiff Business School

WELCOME CONCERT 18:00 - 18:30
Dario Pea

WELCOME COCKTAIL 18:30 - 20:30
Tuesday 19 April 2011
14:30 - 18:30 Registration at LUISS University
18:30 - 20:30 Early Bird Reception at LUISS University

Wednesday 20 April 2011
at Auditorium "Parco della Musica" Sala "Santa Cecilia"
11:00 - 15:30 Registration
14:30 - 15:00 Welcome address
15:00 - 16:30 Opening Session 1
16:30 - 18:00 Opening Session 2
18:00 - 18:30 Welcome Concert
18:30 - 20:30 Welcome Cocktail

Thursday 21 April 2011
at LUISS Guido Carli University
08:30 - 18:00 Registration
09:00 - 10:30 Parallel Sessions, Research Fora, Symposium
10:30 - 11:00 Coffee Break
11:00 - 12:30 Parallel Sessions, Research Fora, Symposium
12:30 - 14:00 Lunch
14:00 - 15:30 Parallel Sessions, Research Fora, Symposium
15:30 - 16:00 Coffee Break
16:00 - 17:30 Parallel Sessions, Research Fora, Symposium

Friday 22 April 2011
at LUISS Guido Carli University
08:30 - 12:30 Registration at LUISS University
09:00 - 10:30 Parallel Sessions, Research Fora, Symposium
10:30 - 11:00 Coffee Break
11:00 - 12:30 Parallel Sessions, Research Fora, Symposium
12:30 - 14:00 Lunch
14:00 - 15:30 Parallel Sessions, Research Fora, Symposium
15:30 - 16:00 Coffee Break
16:00 - 17:30 Parallel Sessions, Research Fora, Symposium
17:45 - 18:30 General Assembly

at "Salone delle Fontane" Via Ciro di Grande 10/12 Rome - EUR Area
20:00 - 23:30 Closing Networking Cocktail
Welcome to EAA 2011

Dear Colleagues,

It is a great pleasure to invite you to attend the 34th Annual Congress of the European Accounting Association which will be held jointly by the EAA and the Faculties of Economics of LUISS Guido Carli University of Rome and the University of Siena.

The Annual Congress will take place in Rome. The opening session will take place at the "Auditorium Parco della Musica" and the other sessions will be held at LUISS Guido Carli University in Rome on April 20-22, 2011.

We are delighted to provide another opportunity for our colleagues from all around the world to strengthen the ties between themselves. Thus, we hope that it will help to promote our advancement in accountancy and finance through the exchange of views and ideas.

Italy has been home to many European cultures, such as the Etruscans and the Romans, and later was the birthplace of the university and of the Renaissance, that began in Tuscany and spread all over Europe. Rome, with its more than 2.600 years of history and culture, is one of the most beautiful cities in the world. Combining the splendour of its unique artistic, archaeological and environmental heritage with the fast-paced existence of a modern metropolis, it offers a wide choice of activities.

We are looking forward to welcoming you to the exciting city of Rome in April 2011.

The Doctoral Colloquium will take place in Siena on April 16-19, 2011. Siena is one of Italy's most famous tourist destinations. Each year on 2nd July and 16th August visitors are attracted to a celebration by the city's historical origins in the form of the traditional "Palio", a medieval horserace around "Piazza del Campo". According to legend, Siena was founded by Senio and Ascanio, the sons of Remus, whose brother Romulus founded Rome. Statues of the famous she-wolf nourishing the twin brothers Romulus and Remus can be seen throughout the city, evoking its link with Rome.

Angelo Riccaboni, Congress Chair
Giovanni Fiori, Deputy Chair