The Impact of IFRS Goodwill Reporting on Financial Analysts' Equity Valuation Judgements: Some Experimental Evidence

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Abstract

This paper uses an experiment to investigate how professional financial analysts evaluate a corporate acquisition announced by an IFRS preparer. The findings suggest that professional analysts are affected by preparers' acquisition premium allocations in a potentially misleading way as the participants considered the acquisition to be value-enhancing when the premium was allocated to goodwill, but value-reducing when allocated to identifiable intangible assets. These effects were mitigated at the aggregate level when additional discounted cash-flow (DCF) analysis information was provided, however, there were significant differences in information search behaviour as quite many participants focused primarily on the exploitation of earnings information.

Keywords: financial analysts; goodwill; acquisition; equity valuation.

JEL classification: C88, C90, D83, M41

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1. Introduction

In 2001, the Financial Accounting Standards Board (FASB) made a major change in the US accounting standards on business combinations and goodwill treatment (SFAS 141, SFAS 142) followed by a corresponding change in the international accounting standards which came into force in 2005 in many jurisdictions via the International Accounting Standards Board's (IASB) adoption of IFRS 3.[1] These accounting changes were significant in that the pooling method became prohibited and systematic amortisation of goodwill was replaced by impairment tests. In addition, the standards prescribed weak recognition criteria for identifying previously unrecognised intangible assets in the target and fair value measurement to be applied for the target's identifiable assets and liabilities, i.e., two policies working against high goodwill amounts being recognised at the acquisition date. A basic premise for the weaker recognition criteria was that 'the decision-usefulness of financial statements would be enhanced if intangible assets acquired in a business combination were distinguished from goodwill' [IFRS 3, Basis for Conclusions (BC) 158]. In practice, IFRS 3 involves accounting choice for preparers with regard to the allocation of acquisition premiums to identifiable intangible assets versus goodwill (Glaum *et al*., 2013) and this study investigates how financial analysts' equity valuations are affected by these accounting judgements.

Adopting an experimental approach, this paper investigates how 40 professional financial analysts evaluate the effects of corporate acquisitions under the new accounting regime. We aim for a realistic setting with professional financial analysts as participants and using a real firm's fictive, but realistic, bid offer. A web-based application was developed for the purpose of the experiment, using a 2 × 2 mixed between- and within-subjects design. The accounting choice regarding the acquisition premium was manipulated between the participants. In the 'goodwill only'-version, the whole acquisition premium was allocated to goodwill with no goodwill impairment charges during the forecast period, and in the 'identifiable intangibles recognised'-version, amortisable identifiable intangible assets of a substantial amount were recognised. Since the identifiable intangibles were amortised, reported profits were lower according to this version. Expected future cash flows were the same in both versions. The amount

[1] IFRS 3 (Business Combinations) and SFAS 141 (Business Combinations) have later been revised following a joint conversion project of the IASB and the FASB. References to IFRS 3 in this paper apply to the version including amendments up to January 17, 2008.

of provided information was manipulated within subjects. During the first stage, the participants received basic information, and at the second stage, additional valuation measures were added. This corresponds to a decision context where the analyst initially has to respond to clients based on limited and less sophisticated measures, and subsequently gets access to more sophisticated analyses.

This paper makes contributions to various strands of the accounting literature. First, the paper contributes to the accounting choice literature by investigating how financial analysts are affected by preparers' allocation of acquisition premiums to goodwill versus identifiable intangibles. Prior empirical-archival research has evaluated the impact of the new accounting regime on capital market variables and researchers seem to agree that the new standards give management more discretion in areas such as recognition of intangible assets and accounting estimates related to impairment tests of goodwill. However, there are mixed conclusions as to whether the increased room for accounting choice by preparers have predominantly positive effects, in terms of more private information provided by management to investors through the estimates made (Lee, 2011), or negative effects related to increased information uncertainty and lack of management accountability for acquisitions made (Jarva, 2009; Ramanna and Watts, 2012). Surprisingly, there is a lack of behavioural research in this area and more studies have been suggested by, for example, Brüggemann *et al.* (2013). Although, there is a long tradition of evaluating the impact of accounting choice on users' forecasts and valuation-judgements in behavioural accounting research (cf., Libby *et al*., 2002; Libby, 2005), the number of such studies has decreased in recent years. In the specific area of acquisitions, there is one prior study by Hopkins *et al.*, (2000), pertaining to accounting methods used in the USA before the abovementioned changes, i.e., in the late 1990s. The current paper builds on the work of Hopkins *et al.* (2000), but evaluates the effects of corporate acquisitions on financial analysts' equity valuation judgements under the IFRS 3 setting and during a different time period (experiment conducted in 2011).

Second, this paper provides further insight into analysts' information processing in the valuation context. As emphasised by Bradshaw (2009), the study of analysts' information processing is not easily accessed by archival studies and a number of more field-based studies have recently been published, aiming at improving our understanding of how analysts use information for valuation purposes (Beccalli *et al*., 2014; Bischof *et al*., 2014; Abhayawansa *et al*., 2015; Brown *et al*., 2015). Earlier field-based research by Barker (1998; 1999; 2000) in this

area suggests that the need for an immediate response based on basic information followed by more sophisticated analysis corresponds to the real-life situation of many analysts. In line with the earlier work by Barker, both Brown *et al*. (2015) and Abhayawansa *et al*. (2015) point at the importance of meeting client demands through quick processing and reactions to earnings-related information, whereas more in-depth analysis takes place later on. Our study contributes by using such an information processing setting in a controlled experiment environment. This is an extension compared to the experimental design used by Hopkins *et al*. (2000).

Third, experimental research has the potential disadvantage of not being sufficiently relevant outside the laboratory context and this study differs from experimental studies in general in that it has a more realistic setting. In particular, as we use a real firm's fictive, but realistic, bid offer, we were able to also conduct the experiment using a number of actual sell-side analysts of the real firm as participants. Although only six analysts participated in this supplemental experiment, the results and written comments from these analysts provide additional insight into their evaluations of acquisitions and allow for further scrutiny of the external validity of the experimental design and the results.

Section 2 positions the paper in the context of prior research and the hypotheses are derived. Section 3 presents the research design and methodology, followed by the presentation of empirical results in section 4. The paper ends with section 5, which includes a discussion of the results and concluding remarks.

2. Prior research and hypotheses

2.1 Accounting choice in the area of acquisitions

The new accounting regime for business combinations and goodwill referred to in the previous section led to changes in the range and scope of *accounting choices* available to managers. Fields *et al*. (2001, p. 256) describe accounting choice as 'any decision whose primary purpose is to influence […] the output of the accounting system in a particular way.' Choices could be either distinct such as the choice between the cost model and the fair value model for investment properties (IAS 40) or they could provide room for judgement as with regard to the distinguishing of identifiable intangible assets from goodwill (cf., IFRS 3, BC 131) dealt with in this paper. The accounting choices here pertain to the recognition and measurement of identifiable intangible assets and can be described by referring to the following two paragraphs of IFRS 3:

13. The acquirer's application of the recognition principle and conditions may result in recognising some assets and liabilities that the acquiree had not previously recognised as assets and liabilities in its financial statements. For example, the acquirer recognises the intangible assets, such as a brand name, a patent or a customer relationship, that the acquiree did not recognise as assets in its financial statements because it developed them internally and charged the related costs to expense.

18. The acquirer shall measure the identifiable assets acquired and liabilities assumed at the acquisition-date fair values.

Since goodwill is measured as the difference between the consideration transferred and the fair value of the net of identifiable assets and liabilities, the acquirer's estimates according to paragraphs 13 and 18 will directly influence the goodwill amount. For example, if managers of the acquiring company interpret paragraph 13 in a very narrow sense and do not recognise identifiable intangible assets or underestimate the fair value according to paragraph 18, this will lead to a larger goodwill amount, all else being equal. In turn, this affects future income statements in that intangible assets will be amortised over useful life in accordance with IAS 38 (Intangible Assets)[2] whereas goodwill shall not be amortised but periodically tested for impairment in accordance with IAS 36 (Impairment of Assets). The IASB expected the weaker recognition criteria referred to in paragraph 13 to enhance the decision-usefulness of financial statements, in that users to a greater extent would be able to distinguish identifiable intangible assets from goodwill (IFRS 3, BC 158). One theoretical argument in support of this view is that weaker recognition criteria (and increased use of fair value measurement, p. 18) will enable managers to provide more private information to investors about the quality of the net assets acquired through the business combination (cf., Lee, 2011). Furthermore, Wyatt (2005) and Matolcsy and Wyatt (2006) offer some empirical support for the view that investors benefit from the reporting of identifiable intangibles rather than goodwill in that the former enhances their understanding of the underlying economics of the intangible assets.[3] A related view is offered by Shalev (2009), who finds that preparers

[2] In the experiment we will presume amortisation of identifiable intangible assets over a finite useful life. Subject to meeting certain requirements, IAS 38 would allow for the use of an indefinite useful life for such assets, however, the standard advocates a restricted use of this option. The standard says, for example, that the indefinite useful live may not depend on planned future expenditures in excess of that required to maintain the asset's standard performance at the time of estimating useful life (IAS 38, p. 91) and '…Uncertainty justifies estimating the useful life of an intangible asset on a prudent basis…' (IAS 38, p. 93). The references to IAS 38 pertain to the January 2008 amended version of the standard.

[3] Wyatt (2005) reports that Australian managers are making capitalisation choices for intangible assets by reference to their firms' underlying economics (i.e. technology strength, cycle time and property-rights-related conditions), which implies that capitalised intangible assets represent useful information for distinguishing firms with *more certain* versus *less certain* underlying intangible assets. This result also applies to the identifiable intangible assets in connection with acquisitions. With regard to such assets Wyatt (2005, pp. 969–970) reports: 'Further, the

seek to avoid transparency in their financial reporting when the acquisition premium is to a lesser extent allocated to identifiable intangible assets. Shalev argues that this is consistent with a behaviour where acquirers downplay 'bad news' for investors by trying to hide overstatement of goodwill in the purchase price allocation in order to avoid amortisation.

In the review paper by Fields *et al*. (2001), the authors conclude that '…there is still no consensus on what purposes accounting choices serve' (p. 257). There will be managers who fully comply with the intention of the standard setter and report the nature and value of acquired identifiable intangibles (e.g., brand names, customer relationships and product rights),[4] but there will also be managers who make opportunistic choices with the aim to report high amounts of goodwill, and corresponding low amounts of recognised identifiable intangible assets, in order to improve reported earnings, as goodwill impairment losses can be expected to be lower than the amortisation of identifiable intangible assets, at least in the short term. In turn, managers might expect the higher earnings numbers to result in higher stock prices, contributing to the managers' compensation or reputation. In this context, Shalev *et al*. (2013) find, based on a US sample, that CEOs whose compensation packages rely more on earnings-based components are more likely to over-allocate the purchase price to goodwill. A study by Hamberg *et al*. (2011) suggests that goodwill impairments under IFRS 3/IAS 36 will be considerably lower than the corresponding sum of goodwill amortisations and impairments under the preceding IFRS accounting regime. There is thus some empirical support for the view that preparers will be biased towards allocating acquisition premiums to goodwill rather than identifiable intangibles when they have incentives to do so. The next question is how this accounting choice will affect financial analysts' valuation judgements.

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intangible assets which management have a 'voluntary' (i.e., unregulated) choice to record–identifiable intangible assets–are more highly correlated with underlying economic factors compared to the two less discretionary classes, purchased goodwill and R&D assets. The former are also more highly valued by investors compared to the two other classes. Limiting the choice to record intangible assets would thus tend to reduce, rather than improve, the quality of the balance sheet and investors' information set. Overall, these findings suggest investors and firms can benefit from this discretion and the concerns about wholesale manipulations are overstated (at least in the Australian setting).' In a subsequent study, Matolcsy and Wyatt (2006) report empirical results consistent with the hypothesis that analysts expect firms with relatively more certain intangible investments to signal this fact by capitalising intangible assets. Both Wyatt (2005) and Matolcsy and Wyatt (2006) attribute their results to the Australian setting, where capitalisation had become increasingly 'routine' since the late 1980s and managers and analysts had experience of preparing and interpreting such information. Their results appear to be much in line with the IASB's and FASB's shared view that managers are expected to inform users about intangibles that are more certain by recognising identifiable intangible assets in the purchase price allocation (IASB, 2008, BC 158).

[4] In this context, the study by Stent *et al*. (2015) suggests that many preparers do not even consider the financial statement impact in connection with IFRS accounting choice. Their study concerns a distinct choice of timing of IFRS adoption which may be different compared to the judgement-related choice concerning purchase price allocation, as the timing of IFRS adoption concerns when, not if, the financial statement effects will occur. In addition, some of the respondents in the survey were accountants, who might take a different view compared to managers.

2.2 Financial analysts' equity valuation judgements

Financial analysts use financial statement information for equity-valuation purposes and prior studies have investigated what models they apply. Key textbooks on corporate valuation, such as Koller *et al*. (2010) and Penman (2012) advocate the use of sophisticated multi-period (i.e., based on long-term forecasts) present value models with free cash flow or residual income as the valuation attribute. In contrast, empirical studies based on context analysis of analyst reports and interviews suggest that analysts primarily rely on price-to-earnings (P/E) ratios and similar valuation multiples (Demirakos *et al*., 2004; Asquith *et al*., 2005) and in many cases combine different models, most commonly discounted cash flow (DCF) and P/E valuation (cf., Demirakos *et al*., 2004; Imam *et al*., 2008; 2013; Brown *et al*., 2015; Abhayawansa *et al*., 2015). The P/E ratio is typically calculated by comparing the current share price to the earnings-per-share (EPS) forecast for the current financial year. The P/E valuation technique generally involves comparisons of companies in the same industry sector in order to determine whether a company is trading at its 'correct' P/E ratio compared to peers or interest rate level.

Against this background, the next question concerns how the information reported by companies feeds into analysts' use of DCF and P/E ratio analyses. Barker (1999) investigated why the practical use of valuation models by fund managers and financial analysts differs from the theoretical literature. On the basis of an extensive empirical study, he concluded that it is the inherent uncertainty of future outcomes that forces financial analysts and fund managers to adopt a short forecast horizon and to rely on subjective estimations of terminal values. In this context, the way the P/E ratio is calculated implies a very strong focus on a short forecast horizon. Barker also relates the use of P/E ratios to the *need for responding quickly to news* (Barker, 1998). Based on a study of financial analysts' use of earnings information, involving participant observation (40 analysts) and interviews (32 analysts), Barker (2000, p. 99) described what happened when an interim report is announced:

> As soon as the results are announced [...] there is always an immediate response. The results are assessed electronically, and printed out and skimmed for evidence of any surprises [...] Typically, the first thing to be noticed is earnings.

Barker further reports that when there was a need to make an adjustment of reported earnings due to, for example, significant items affecting comparability, this was done in a superficial way and the speed of the reaction was essential. On the one hand, financial analysts treated the announcement of earnings with immediacy and importance but, on the other hand, they were only interested in earnings to the extent they were a medium for income generation to the firm (*ibid*., p. 107). When the earnings news had been exploited, the subsequent interest in the reported earnings was low. In conclusion, the information environment for the analysts was such that they developed '...only limited understanding of the structure and valuation-relevance of the financial statements, and also of the content and impact of financial reporting standards' (*ibid*., p. 95). In a similar vein, two recent field-based studies (Brown *et al*., 2015, Abhayawansa *et al*., 2015) have pointed at the high importance placed by analysts on earnings-related information and earnings-based multiples in connection with their short-term responses to clients in connection with companies' announcements of financial information.

Going beyond the short-term response to financial information, the results of Barker (1998; 1999; 2000) suggest that valuation multiples are used as a point of departure from which fundamental analysis is conducted. Financial analysts often develop DCF models of the companies they follow and update their models with revised estimates some time after the immediate response to financial information. Abhayawansa *et al*. (2015) report that this can sometimes be problematic, as the earnings-related valuation may differ from the DCF valuation outcome (p. 17):

> However, as analysts used both these models in tandem, it was necessary for the DCF-based valuation to be consistent with the multiple-based valuation. This was achieved by reverse engineering the DCF input parameters [...]

Gleason *et al*. (2013) conducted a study on US data for 1997 through 2003 where the models used by analyst were inferred by comparing analyst target prices with researcher-constructed valuation estimates. They report that the quality of financial analysts' price targets substantially improved when they appeared to be using a sophisticated valuation model compared to a simple valuation-multiple approach. In a similar vein, Imam *et al*. (2013) found that a combined use of earnings-based multiples and a cash-flow based model reduces the forecast error. This suggests

that there is much to be gained for analysts from complementary use of sophisticated valuation models, instead of solely relying on earnings-based multiples.

2.3 Development of hypotheses

The aforementioned research results have motivated the design of the current study: During the first stage of the experiment, an acquisition is announced (a realistic press release) by an acquirer and the participating financial analysts are asked to respond rather quickly to the news. As a basis for their judgement during the first stage they were given pre- and post-acquisition financial information and P/E ratios, presented in the same manner as in financial analyst reports, but not any sophisticated analysis of the kind referred to in corporate valuation textbooks (cf., Demirakos *et al*., 2004). At the second stage, corresponding to a realistic context where analysts have had time to feed information into a spreadsheet model and make a more comprehensive fundamental analysis, more valuation-related information (e.g., a DCF valuation) was provided. Both the acquirer and the target company are profit-generating companies and the expected future free cash flows of the combined entity are the same under both of the following alternatives for allocation of the acquisition premium (the purchase price minus the book value of the target's net assets):

Alternative 'GO' – Goodwill only: The acquisition premium is allocated solely to goodwill, which is not impaired during the forecast period (3 years).[5]

Alternative 'IIR' – Identifiable intangibles recognised: A substantial part of the acquisition premium is allocated to identifiable intangible assets and the residual is recorded as goodwill. The identifiable intangibles are amortised over useful life whereas the goodwill is not impaired during the forecast period (3 years).

Based on the literature review in section 2.2, we expect financial analysts to primarily aim for exploiting earnings information during their initial phase of analysis, when asked to respond fairly quickly. Accordingly, we expect their valuation judgements to be affected by the accounting choice between the GO and the IIR alternatives as this choice

[5] We have assumed that the goodwill item is not impaired during the forecast period (three years) because we believe that it is uncommon, in practice, to predict goodwill impairment losses when preparing a forecast where the acquisition is expected to develop according to plan (e.g., realisation of synergies, integration costs). In addition, to the best of our knowledge, goodwill impairment losses are uncommon, in practice, during the first years after an acquisition.

results in different earnings numbers. One may object to this expectation as it implies that analysts receiving the GO version will value the acquirer higher compared to those receiving the IIR version, despite future free cash flows being the same in both alternatives. However, prior behavioural research has suggested that analysts are unable to see through differences in accounting treatments in situations like the one examined. Hopkins *et al*. (2000) conducted an experimental study under the old accounting regime (in the US) using 113 financial analysts. They manipulated the accounting method used by the acquirer for an acquisition: (1) pooling of interests, (2) purchase with the accounting acquisition premium expensed as in-process research and development, or (3) purchase with the accounting acquisition premium capitalised as goodwill and amortised over six years.[6] Cash flows were identical across all three alternatives, but EPS numbers varied. When deriving their hypotheses, Hopkins *et al*. assumed that the financial analysts would use the reported numbers in their materials rather than, for example, adding back the goodwill amortisation in alternative (3). None of the three methods referred to by Hopkins *et al*. (2000) are allowed according to US GAAP or IFRS according to the new accounting regime that came into force in the beginning of the new millennium. However, both the results and the experimental design of their study are relevant to our study. Hopkins *et al*. (2000) evaluated how analysts' stock-price estimates for the acquirer were affected by the differences in accounting methods for business combinations and they found (*ibid*., p. 276):

> Consistent with our expectations, analysts' [stock] price judgments were lowest when the company applied purchase accounting and ratably amortized goodwill. Analysts estimated higher [stock] prices when the company applied either pooling-of-interest accounting or purchase accounting with immediate write-off of the acquisition premium as in-process research and development.

The results of Hopkins *et al*. (2000) imply that the analysts emphasised reported earnings numbers in the experiment materials, and made a valuation of the acquisition effects in a manner consistent with applying a P/E valuation model. In turn, their results imply that managers may prefer accounting treatments where there is no amortisation charge during the post-acquisition period (i.e., goodwill is not recognised at all under the pooling-of-interest method and, in a similar vein, there is no goodwill to amortise when the acquisition premium is immediately written off as

[6] In addition to accounting method, Hopkins *et al*. (2000) had a second dependent variable: the year in which the business combination was consummated. This variable related to differences in the date from which to include the income statement under the pooling method compared to the purchase method. There is no corresponding problem under the new standards and this variable is of less relevance for the purpose of our paper.

in-process R&D), as it leads analysts to predict higher stock prices. Under the new accounting regime, amortisation is only charged when part of the acquisition premium has been allocated to identifiable intangibles. If the acquisition premium is allocated to goodwill, there is no amortisation but only periodical impairment tests. Following the results of Hopkins *et al*. (2000), we thus expect analysts to assign higher equity values for the acquirer when the acquisition premium is allocated to goodwill than when the acquisition premium is allocated to identifiable intangible assets. On the basis of the aforementioned lines of reasoning, we formulated the following hypothesis in regard to how analysts would react to the release of news about a corporate acquisition involving basic financial information.

> *Hypothesis 1*: Financial analysts will predict a higher value for a company's outstanding common stock when the company allocates the acquisition premium to goodwill than when the company allocates the substantial amount of the acquisition premium to amortisable intangibles.

It should be emphasised that the hypothesis concerns the immediate responses by financial analysts when reacting to the takeover announcement, where we expect the analysts to rely on reported earnings information (cf., Hopkins *et al*., 2000). Consistent with the research presented in section 2.2, we expect that there will be a second stage where financial analysts conduct a more thorough and sophisticated fundamental analysis. Accordingly, more valuation-related information was provided at the second stage of our experiment, including a DCF analysis showing a valuation of the acquirer which is the same as before the acquisition, that is, the acquisition neither increases nor decreases the DCF value of the acquirer. After considering the additional information at Stage 2, the participating analysts were asked to make another equity valuation judgement.

INSERT FIGURE 1 ABOUT HERE

When exposed to this additional information, the analyst might theoretically react in two ways (see Figure 1): (1) predict an unchanged equity value in accordance with the DCF analysis or (2) maintain their initial judgement from the first stage (i.e., an increased or decreased equity value). Specifically, finance theory suggests that sophisticated users of financial information will choose alternative (1). The DCF model is a theoretically correct valuation model which professional analysts are trained to use; it is emphasised in many textbooks on corporate valuation (e.g.,

Demirakos *et al*., 2004). Therefore, we hypothesise that the exposure of the DCF analysis, indicating an unchanged value of the acquirer after the acquisition compared to before the acquisition, will make some financial analysts reconsider their initial equity-valuation judgements and, thus, predict that the equity value will be unchanged. As a consequence, the difference in analyst judgements that assumingly exists at Stage 1 due to how the acquisition premium was allocated by the accounting choice of the acquirer (Hypothesis 1) will diminish. However, there are arguments against this influence by DCF analysis on analyst judgements. Prior research suggests that analysts do have a strong focus on earnings-based multiples and although combinations with DCF valuation appears to be common in practice (see section 2.2), some analysts may choose to hold on to their original earnings-based valuation when later exposed to a DCF valuation (cf., Abhayawansa *et al*., 2015). We also acknowledge the possibility of different behavioural tendencies among the analysts based on research findings from psychology (cf., Gilovich, 1991; Hogarth and Einhorn, 1992; Russo *et al*., 1996; Russo *et al*., 2000). The findings from psychology will be further referred to when discussing the empirical results.

At Stage 2, the DCF valuation shows that the acquisition neither increases nor decreases the value of the acquirer (combined entity). Based on finance theory, we therefore formulate the following hypotheses in regard to how analysts will react when given additional information and prompted to reconsider their equity valuation judgement.

> *Hypothesis 2*: In response to additional information about discounted cash flow valuation that is inconsistent with previously received information, there will be no differences in the equity valuation judgements among the financial analysts regardless of whether the acquisition premium in the previously studied takeover announcement had been allocated to goodwill or to amortisable identifiable intangible assets.

3. Experimental design and method

The effects of different accounting treatments on analysts' equity valuation judgements were examined by conducting a web-based experiment in which analysts evaluated a case in which the multinational telecom company Ericsson acquires a fictitious firm.[7] While the information about Ericsson was actual and current, and realistic in that the company regularly makes acquisitions, the details about the fictitious firm were made-up. The experiment involved one between-subjects factor, which concerned whether the acquisition premium was allocated to either goodwill (GO-setting) or amortisable intangibles (IIR-setting), and one within-subjects factor related to the amount of information given to the participants (Stage 1 and Stage 2 in the experiment).

3.1 Participants

Participants are 40 financial analysts[8] who participated in the web-based experiment in February and April 2011 as part of an education in finance and accounting for professionals.[9] On average, the participating analysts had more than four years of experience. Thirty-nine of the analysts had never conducted valuations of the Ericsson share or given recommendations concerning the Ericsson share (one analyst did not respond to these questions).

3.2 Study materials and tasks

Each participant entered a web-site where he/she was asked to evaluate a realistic but fictitious case where the company Ericsson had made an acquisition of a fictitious company called XX Corp. Besides being told that the case was fictitious and that Ericsson had permitted the authors to use the Ericsson name and company facts, the participant was informed that all responses were anonymous and would be treated with confidentiality. After the initial instructions, the participant clicked a button and was exposed to the first stage of the tasks: a web-page showing a press release with the heading 'Ericsson announces cash offer to acquire XX Corp'. The left column of the web-page had eight web-links that the participant could select (see Figure 2).

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[7] Ericsson's parent company is Swedish and the share is listed on the stock exchanges Stockholm NASDAQ OMX and New York NASDAQ. The reason for using a real instead of a fictitious acquirer was to enable the experiment to be conducted with actual sell-side analysts of the acquirer (see supplemental analysis in section 4.4). In this way, the external validity of the results and the experimental design could be further evaluated.

[8] Forty-nine analysts participated in the experiment but the responses of nine analysts were, however, removed from the subsequent analyses, as they performed the task in an inconsistent manner. To be specific, six participants had viewed neither the accounting information regarding the acquired company nor the post-acquisition accounting information and three participants examined fewer than 8 information screens in less than 15 minutes. For robustness check purposes, we examined the participants who used fewer screens and less time; results were unaffected.

[9] The education is a diploma program for financial analysts provided by a European business school since more than 15 years. The whole program is run as an open program and certain modules of the program are run as in-house programs for big financial institutions. The majority of the analysts came from two banks, where one bank belongs to the 29 banks of global systemic importance listed by the Financial Stability Board and the other one is the largest in its home country and a leading financial enterprise in northern Europe.

INSERT FIGURE 2 ABOUT HERE

While one link concerned the decision menu, the other seven links concerned financial information: press-release, balance sheet, profit/loss statement, cash flow statement, multiples, share information and a decision screen.[10] When applicable the information was provided for three historical years (2008–2010) and three forecast years (2011–2013). The screens concerning balance sheet, profit/loss statement, cash flow statement, and share information included *pre*-acquisition and *post*-acquisition information about Ericsson as well as *pre*-acquisition information about the target firm (XX Corp).

INSERT FIGURE 3 ABOUT HERE

Figure 3 shows an overview of the structure of the material that the participants could access at the two stages. The information and decision screens were accessible via web-links and all information screens are shown in appendices 1–8. The design of the screens was based on the way financial information is actually presented in real analyst reports for Ericsson. The experiment materials were based on the information from the fourth quarter report for 2010 (and earlier financial reports) and, thus, there was no additional public financial information from Ericsson available to the participants outside the experimental context.

When the participant felt ready to make a decision he/she clicked on the decision link (see Figure 2). The screen that then appeared asked the participant to state how the acquisition would affect his/her valuation of the Ericsson share (= equity valuation judgement) by selecting one of three options: increase, decrease, or no effect (see Appendix 5). Arguably, those options reflect the assessments that analysts in real life are asked to immediately form after a takeover announcement. The participant was also asked to report his/her confidence in that decision on a six-points scale ranging from 'Absolutely uncertain' (1) to 'Absolutely certain' (6) and asked to write a brief description of the reasoning behind his/her assessment. After submitting those responses, a pop-up window appeared and announced that additional information had been released. At this second stage of the tasks, the participant was asked to review this information and reconsider his/her prior assessment on how the acquisition would affect the evaluation of the

[10] Under 'Multiples', P/E ratios were provided for Ericsson and two peer groups. Peer group 1 included Alcatel, Cisco Systems Inc., Nokia, and Qualcomm. Peer group 2 included Dell Inc., Hewlett Packard Co., IBM, Intel Corp., Microsoft Corp., Oracle Corp., and Texas Instruments Inc.

Ericsson share. The newly released information consisted of a DCF analysis of Ericsson and a peer comparison based on the multiple enterprise-value-to-sales (EV/Sales), both being reported *pre*-acquisition and *post*-acquisition. Again, the design of these screens was based on the way such information is presented in actual analyst reports for Ericsson.[11] The participant accessed those details and the information of the first stage by clicking on the respective web-links. Once the participant felt he/she was ready for making a decision, he/she clicked on the decision link. This screen prompted him/her to state the effects of the acquisition on the valuation of the Ericsson share by selecting one of three options (decrease, increase, or no effect), to report his/her confidence in that decision on a six-points scale with the aforementioned anchors, and to write the rationale for his/her assessment (see Appendix 8). In addition, the participant was asked to distribute 100 points among six items of financial information (DCF analysis, EV/EBITDA, EV/EBIT, EV/Sales, Price/Book Value, and P/E ratio) depending on their importance for his/her assessment. Finally, the participant responded to background questions (i.e., age, gender, years of experience and familiarity with the Ericsson share).

3.3 Experimental treatments and independent variables

The design of the experiment involved two treatments. First, there was a between-subjects factor concerning the acquirer's (Ericsson's) accounting treatment of the acquisition premium for XX Corp. Ericsson prepares consolidated financial statements under (EU-endorsed) IFRS and the acquisition premium must therefore be allocated in compliance with IFRS 3. The participants were randomly assigned to either the GO-setting (n = 21) or the IIR-setting (n = 19). In the GO-setting, the acquisition premium was, within the limits of complying with this standard, solely allocated to goodwill and no impairments were made. In the IIR-setting, also within the limits of complying with IFRS 3, a significant part of the acquisition premium was allocated to amortisable identifiable intangibles. Figure 2 describes how those settings differed as regards the press-release.

INSERT TABLE 1 ABOUT HERE

[11] With regard to the DCF, such a valuation requires that a set of assumptions are made concerning, for example, the cost of capital and the forecast horizon. Such assumptions were presented in the same manner as can be found in real analyst reports for Ericsson (see appendices 6 and 7).

Table 1 shows how the financial information of the study material was affected by the allocation of the acquisition premium across the two settings. Due to the amortisation of identifiable intangibles in the IIR-setting, the operating profit, pre-tax profit, net profit and reported EPS in the GO-setting were higher than the corresponding measures in the IIR-setting. The P/E-ratio (current share price over reported EPS) differed across the two settings in that this multiple increased (decreased) when the acquisition premium was allocated to identifiable intangible assets (goodwill). Some measures, such as EBITDA and the EV/Sales ratio, were unaffected by amortisation and were not affected by the experimental treatment.[12] The cash flows post-acquisition, as reported in the cash flow statements, were identical for the two settings. The peer comparison of earnings forecasts and P/E ratios also included a column with earnings and P/E ratios where the amortisation of identifiable intangibles acquired in connection with corporate acquisitions was added back, as analysts sometimes prefer to exclude such items in earnings per share calculations (Bradshaw and Sloan, 2002; Chen, 2010).

Secondly, there was a within-subject factor. This experimental treatment meant that all participants were exposed to different amounts of information at the two stages. At Stage 1, the participants could study a total of 14 screens of financial information regarding Ericsson and the acquisition of the fictitious company XX Corp: balance sheet, profit/loss statement,[13] cash-flow statement, multiples and share information.[14] At Stage 2, the participants received additional information: (1) pre- and post-acquisition DCF analyses and (2) pre- and post-acquisition EV/Sales multiples.[15]

3.4 Procedure

The web-based experiment was conducted in three separate sessions, involving 13, 8, and 19 participants. Statistical tests showed no differences between the sessions regarding the participant responses. All sessions followed similar

[12] EBITDA refers to earnings before interest, taxes, depreciation, and amortisation. EV refers to enterprise value, measured as the sum of market capitalisation and debt.

[13] Regrettably, a minor error in the growth dimensions was presented to the participants in one screen. For the following reasons we argue that it did not influence the results. Firstly, it was an obvious error, based on calculations of underlying information apparent to the participants in the same screen (P/L statement), in the share information screen, and in the multiples screen. The growth rate dimensions were only computed in the P/L statement. Secondly, all participants spent more than 15 minutes on the task and viewed more than 8 information screens. Consequently, participants considered more information than just the growth dimensions. Thirdly, our results contradict any influence (as the growth dimensions were the same over treatments). We would like to thank the reviewer for drawing our attention to this. Appendix 4 contains the information as it was presented to the participants. The Ericsson post-acquisition EPS growth rates y-o-y (%) stated: 2009: -8.2; 2010: 45.1; 2011E: 88.8; 2012E: 5.5; 2013E: 7.2; but should have stated 2009: -67.4; 2010: 203.5; 2011E: 41.9; 2012E: 19.0; 2013E: 12.0 in the GO-setting, and 2009: -67.4; 2010: 203.5; 2011E: 10.0; 2012E: 24.6; 2013E: 14.8 in the IIR-setting. The Ericsson post-acquisition EPS (adjusted) growth rates y-o-y (%) forecasts stated: 2009: 14.7; 2010: 15.8; 2011E: 61.3; 2012E: -1.8; 2013E: -0.9; but should have stated 2009: -13.2; 2010: 24.0; 2011E: -2.6; 2012E: 10.3; 2013E: 7.6 in the GO-setting and 2009: -13.2; 2010: 24.0; 2011E: 3.7; 2012E: 9.7; 2013E: 7.1 in the IIR-setting.

[14] These screens are presented in appendices 1–4.

[15] These screens are presented in appendices 6 and 7.

procedures. The experiment leader (= the first author) gave instructions about the web-based experiment in connection with a class in the professional training that all participants attended. Then the participants performed and completed the tasks. Later, the experiment leader presented the analysed results to the participants at a subsequent class dealing with accounting matters in connection with corporate acquisitions.

4. Results

4.1 Analysis at Stage 1

Recall that the participants were, at two stages, prompted to assess how a fictitious corporate acquisition would influence their valuations of the Ericsson share. In this section, the responses pertaining to Stage 1 are analysed.

INSERT TABLE 2 ABOUT HERE

Table 2 shows that about 67 percent of the participants that were exposed to the GO-setting increased their valuations of the Ericsson share. In contrast, 68 percent of the participants in IIR-setting decreased their valuations of the Ericsson share. The results shown in Table 2 are in line with our hypothesis, Hypothesis 1. To test the hypothesis, two non-parametrical statistical procedures were run. First, we used cross-tabulations and a chi-square test, which included the participant judgements and the two settings. The test suggested significant tendencies (χ^2 = 9.95, $p < 0.01$). Secondly, we conducted a Mann-Whitney U-test. The test showed that the GO-setting (mean rank = 25.17) differed significantly (Z = -2.94, p <0.01) from the IIR-setting (mean rank = 15.34).[16] In sum, the two separate analyses provide empirical support for Hypothesis 1.[17] The participants in the two experimental settings did not differ with respect to information search behaviour and confidence.[18] Across the settings, the average participant

[16] The options decrease, no effect, and increase were recoded as 1, 2 and 3 respectively.

[17] As a clarification, the experiment material was manipulated in such a way that the earnings figures indicated a value-enhancing (value-reducing) effect for the GO-setting (IIR-setting). Accordingly, we also tested the conditions separately. We ran two binomial tests, which involved two of the three possible response options: decrease and increase. The option 'no effect' was excluded when running those tests. The tests compared the observed frequencies of participants stating that the share value would either decrease or increase with the frequencies that would be expected given a binomial distribution with a probability of 0.50. If the classification of the acquisition premium did not affect the participant's judgement, then one would expect that the frequency of the response 'decrease' would match that of the response 'increase'. The tests showed that (1) the tendency of the participants in the GO-setting to state that the share value would increase was statistically significant ($p < 0.02$, one-tailed) and (2) the tendency of the participants in the IIR-setting to state that the share value would decrease was also statistically significant ($p < 0.05$, one-tailed). In other words, the participants predicted higher values when the acquisition premium was allocated to goodwill than when allocated to identifiable intangible assets.

[18] Further, we examined to what extent the participants had been exposed to the earnings-manipulation by examining the screens they opened. About 92.5 percent of the participants had opened (both pre- and post-acquisition) the profit/loss statement, the cash flow statement or the multiples screens. Excluding the unexposed participants did not affect the observed results.

opened 11.80 (SD = 2.02) of the 14 available screens and reported a confidence level of 3.42 (SD = 0.85). Information search behaviour and confidence were unrelated to the equity valuation judgements.

4.2 Analysis at Stage 2

Recall that the participants received additional information at Stage 2 of the experiment and were asked to review this information and reconsider their prior responses.

INSERT TABLE 3 ABOUT HERE

Table 3 shows that about 52 percent (42 percent) of the participants in the GO (IIR) setting stated that their valuations of the Ericsson share would increase (decrease). At the second stage, the allocation of the acquisition premium appeared to have less influence on the equity valuation judgements. In fact, statistical procedures showed that the effect was non-significant, suggesting empirical support for Hypothesis 2.[19,20] There were no substantial differences in information search behaviour and confidence between the two experimental conditions. All analysts opened the screen showing the pre-acquisition DCF analysis (by default), 97.5 percent opened the screen showing the post-acquisition DCF analysis and about 82.5 (47.5) percent of them studied the additional pre-acquisition (post-acquisition) EV/Sales-multiple.[21] On average, the analysts reported a confidence level of 3.29 (SD = 0.87), which was not significantly different from the corresponding measure of Stage 1. Finally, equity-valuation judgements were unrelated to information search behaviour and confidence.

4.3 Additional analysis: consistency and information use

Two approaches were used in order to evaluate whether the participating analysts kept or altered their initial share assessments after being exposed to additional information. Firstly, the degree to which the participants remained with their judgements across the two stages was determined by a measure of within-subject agreements (i.e.,

[19] The Mann-Whitney U-test conducted in the second step showed that the GO-setting (mean rank = 22.74) did not differ significantly (Z = -1.37, p =.21) from the IIR-setting (mean rank = 18.03).

[20] Omitting the responses of the four participants that stated 'no effect' at Stage 1 did not alter the result. The three participants of the goodwill condition remained with their evaluation, while the single participant of the other condition altered his evaluation from 'no effect' to 'increase'.

[21] We acknowledge the possibility of a demand effect (e.g., Zizzo, 2010) in that the participants believed that they were expected to form their decision based on the DCF after being asked to reconsider their assessment in the second stage. Measures which could have minimized this possibility (e.g., using between-sessions, within-settings separated by time, or filler tasks) were offset by the difficulties of recruiting financial analysts to participate (cf., Libby *et al*. 2002). However, we provided the additional EV/Sales-multiple to reduce the attention possibly paid to the DCF. We believe that providing the participants with the DCF in an additional step mirrors a real-world setting, supported by previous literature. In other words, we argue that enhanced external validity offsets the possibility of a demand effect (Zizzo, 2010).

Cramér's V denoted φc). For the GO- and IIR-settings, the measure indicated moderately high agreement (φc = 0.52, $p < 0.05$ vs. φc = 0.47, $p < 0.10$), suggesting that the equity valuation judgements at Stage 1 were moderately correlated with those at Stage 2. Secondly, the participant responses were tabulated across the two stages. Table 4 describes the results from the cross-tabulations and suggests that 62.5 percent of the participants (n = 25) across the two settings (GO-setting = 66.7 percent and IIR-setting = 57.9 percent) kept their initial evaluations; an observation consistent with prior psychological research (Samuelson and Zeckhauser 1998; Russo *et al*. 1996; Russo *et al*. 2000). A binary test showed, however, that this observation was not statistically significant.

INSERT TABLE 4 ABOUT HERE

Statistical tests examined whether there were differences between the 25 participants who kept their initial share assessment and those 15 who altered their assessments. At Stage 2, the former group considered fewer information screens (M = 4.84, SD = 2.12) and used less time (M = 285 seconds, SD = 182) than the latter group (Ms = 6.73 and 429, SDs = 2.43 and 188). Those tendencies were significant (t = -2.39 and -2.59, respectively; $p < 0.05$), suggesting that the additional information at Stage 2 had different influence on the participants. As regards Stage 1, the two groups exhibited similar information search behaviour. They had similar levels of confidence at both stages.

INSERT TABLE 5 ABOUT HERE

Furthermore, additional analyses were run in regard to the participants' self-reported information use. Table 5 shows that the average participant stated that DCF was the most important information (M = 38.82, SD = 30.30) followed by P/E (M = 17.55, SD = 20.43). Information use was similar for the participants in the two settings. Information use was unrelated to the observed equity valuation judgements.

4.4 Supplemental analysis

Using the same case materials, a follow-up study was conducted with financial analysts who actually follow the acquiring company (Ericsson). Based on a list provided by Ericsson, emails with invitations to participate in the

aforementioned web-experiment were sent to 78 analysts.[22] Despite several reminders and explicit support for the experiment from Ericsson, we were only able to recruit six analysts (all male) who completed the tasks of the experiment. Admittedly, this participant number is too limited for making any statistical inferences, but still offers unique insight into how the real analysts of the acquirer evaluate the effects of corporate acquisitions. The findings will also be useful in evaluating the validity of the experimental design and, thus, the robustness of the previously reported findings.

INSERT TABLE 6 ABOUT HERE

Table 6 presents the responses of the six analysts. At Stage 1, one of the four analysts exposed to the GO-setting and both of the two analysts exposed to the IIR-setting gave answers consistent with the logic behind Hypothesis 1. Five of the six analysts remained with their initial judgements at Stage 2. As regards information use, one analyst emphasised only one measure (P/E ratio), whereas the five others placed weight on 2–5 different measures. The P/E ratio was the only valuation measure stated to be used by all six analysts.

The written comments of the six analysts shed light on the rationales for their judgements. Two of the three analysts who formed judgements consistent with our hypothesis at Stage 1 (analysts 3, 5 and 6) provided such comments. When describing his judgement at Stage 1, analyst 3 (GO-setting) stated that the acquisition would probably not have any major impact on the DCF value, although the weighted average cost of capital might go down, but assessed that the Ericsson share value would increase due to improved return on equity (ROE) and higher growth rates. This is consistent with the design of Stage 1, as reported ROE is based on net earnings and provides the same indication as the P/E ratio.[23] His preliminary view concerning the DCF valuation was confirmed at Stage 2. He then stated that the higher ROE and the higher growth rates would result in higher multiples and repeated his judgement of an increased equity value. Table 6 also shows that analyst 3 put greater weight on the P/E-ratio (50 percent) compared to the DCF analysis (25 percent). Analyst 6 (IIR-setting) made a 'decrease' judgement at stage 1, but changed his

[22] The follow-up study was conducted during March 2011. As described in section 3, the experiment materials took information from the fourth quarter report for 2010 into account (announced in late January 2011) and, thus, there was no additional public financial information from Ericsson available to the participants outside the experimental context.

[23] Since the bid was a debt-financed cash offer, shareholders' equity did not change due to the acquisition. Accordingly, Ericsson's pre-acquisition ROE forecast for 2011E (9.5%), 2012E (10.3%), and 2013E (11.1%) increased in the GO-setting (2011E: 10.6%; 2012E: 11.9%; 2013E: 12.5%), but decreased in the IIR-setting (2011E: 8.3%; 2012E: 9.9%; 2013E: 10.8%). See appendices 1 and 4.

mind to ‘no effect’ at Stage 2, explicitly referring to the DCF analysis that indicated that there would be no effect on the DCF value.

The other three analysts (analysts 1, 2 and 4), all in the GO-setting, stated no effect (analyst 1 and 4) and decrease (analyst 2). One of them did not provide any rationale, while the other two referred to the Ericsson-specific context. Analyst 2 assessed that the acquisition led to a lower value of the Ericsson share and argued, at Stage 1, that the price level for the target company was too high and ‘even though the financial figures would [*sic*] be correct, Ericsson’s history of acquisitions is not good.’ He also referred to potential cultural problems related to the integration of the two companies. He did not explain why he kept his ‘decrease’ judgement at Stage 2. Analyst 2 seemed to be somewhat negative towards acquisitions made by Ericsson. Such opinions were not part of the experimental design, but might be a part of the real context. Analyst 4, who assessed ‘no effect’ at Stage 1, appeared to make a qualitative compromise in that he viewed the acquisition to be made in a ‘fairly expensive financial way’, but emphasised the importance of a strategic fit and reasoned that the acquisition might be ‘accretive in a strategic way.’ At Stage 2, he maintained his ‘no effect’ judgement and stated: ‘In my 15+ yrs in tech co analysis, DCFs are almost always a flawed metric for M&A.’

5. Discussion and concluding remarks

This paper investigates analysts’ equity value judgements related to preparers’ choices regarding the allocation of acquisition premiums to amortisable identifiable intangible assets versus goodwill (where the latter was not expected to become impaired during the coming three years) under IFRS 3. In this setting, we hypothesised that analysts’ judgements would initially be affected by this choice, as prior research suggest a strong emphasis on earnings multiples among analysts.

The 40 professional European analysts who participated in the experiment interpreted, on average, the acquisition as value-enhancing when the premium paid was allocated to goodwill with no impairment, but value-reducing when the premium was allocated to amortisable intangibles. In substance, this is in line with the results of Hopkins *et al*.

(2000).[24] Although the analysts acquired financial information from a wide set of screens provided in the experiment, their judgements were, on average, consistent with a reliance on income statement information. A follow-up study on a small number of equity analysts, who followed the acquirer (the listed company Ericsson) in reality, showed that the predicted judgements could be observed also in this even more realistic context. We interpret our results as a strong analyst focus on earnings information and earnings-based multiples during the early stage of responding to new information. In general, the short-term focus on earnings is in line with the results of Barker (1998; 1999; 2000), Brown *et al*. (2015) and Abhayawansa *et al*. (2015), which in turn relates, at least partly, to analysts' incentives to exploit earnings-related news for generating commission and to meet client demands more generally.

In the second stage of the experiment, when participants were provided with additional valuation measures, including a DCF analysis, the statistical difference between the two conditions was mitigated. The two-stage design was based on prior research suggesting that analysts proceed from an initial reliance on earnings-based valuation towards more sophisticated fundamental analysis some time after the announcement of information (see section 2.2). The high importance of the DCF was indicated by the self-reported use of valuation measures after Stage 2, where the analysts placed greater weight on the DCF analysis than on the other five metrics. Overall, the results from Stage 2 indicate that the somewhat mechanical reliance on earnings numbers observed at Stage 1 was disrupted as more sophisticated valuation information was provided.

The results from the second stage are somewhat ambiguous in that the effect from the first stage disappeared because 37.5 percent of the analysts changed their opinion, however, 62.5 percent of the analysts kept their initial assessments from Stage 1. In other words, for the latter group of analysts the DCF analysis did not cause any change in judgement. The information search behaviour differed significantly across the two groups in the sense that the analysts who changed their opinions examined more information and spent more time to arrive at a conclusion. This suggests that the problems of interpreting the accounting treatment of the acquisition premium in a sophisticated way may particularly pertain to analysts who do not go beyond the exploitation of earnings information. Indications

[24] The study by Hopkins *et al*. (2000) pertains to the old US setting accounting regime, i.e., none of the methods they evaluated are allowed under the new regime. However, their results concerning the relationship between short-term effects of acquisitions on income statement numbers (i.e., amortisation), and analysts' valuation judgements, were similar to the current study.

of this were also found in our supplemental analysis, where many of the real Ericsson analysts had a strong preference for earnings-based multiples. Recent studies (e.g., Imam et al., 2013; Abhayawansa *et al*., 2015) have reported that analysts tend to use earnings-based multiples alongside with DCF analysis. The results of the current study point at the need for incorporating sophisticated analysis in order to mitigate potential misjudgement from mechanical use of earnings information.

The observation that the majority of the financial analysts maintained their initial judgements at Stage 2 connects to findings in the area of psychology. Behavioural research suggests that people are reluctant to modify their choices despite being exposed to additional cues indicating that another option is better (Samuelson and Zeckhauser, 1988; Russo *et al*., 1996). Such behaviour has been commonly explained by three related tendencies: (1) individuals pay greater attention to the initially presented set of information (Hogarth and Einhorn, 1992; Kahle *et al*., 2005), (2) individuals are victims of confirmation bias leading them to merely consider information that confirms their decisions (e.g., Gilovich, 1991), and (3) individuals distort information that runs counter to the initially preferred option (Russo *et al*., 1996; 2000). Empirical studies show that those tendencies also exist among professional users of accounting information (Andersson, 2004; Bonner, 2007; Kahle *et al*., 2005; Trotman *et al*., 2011). On the other hand, the reactions of individuals in situations where information is presented stepwise could be that they change their minds after each step because they put greater weight on the cues that were given to them more recently (Hogarth and Einhorn, 1992; Kahle *et al*., 2005). The belief-adjustment model by the psychologists Hogarth and Einhorn (1992) assumes that individuals will keep (alter) their opinion when solving tasks associated with long series of consistent information (long series of inconsistent information). However, research in accounting shows mixed empirical evidence for such predictions (Kahle *et al*., 2005). On the basis of the described ambiguous psychological findings, it is reasonable that the analysts reacted differently when provided with additional information. Regrettably, our experimental design does not enable us to establish which of the psychological tendencies are more likely to explain that the majority of the participants did not alter their judgement despite the exposure of further information. The observation that those participants searched less extensively for information and used less time than the participants who changed their judgements is consistent with all three tendencies. This observation may also have real-life implications in that there might exist analysts who primarily emphasise immediate, quick analysis of earnings-based information, but do not proceed to sophisticated analysis.

Like other scientific investigations, the empirical findings reported in the current paper may be associated with limitations and shortcomings. Admittedly, the number of participating financial analysts could have been greater, although it is about the same as in other experiments in accounting with financial analysts as participants (e.g., Fredrickson and Miller, 2004). Great efforts were, however, carried out to recruit more analysts but turned out to be unsuccessful, confirming the claim by Libby *et al*. (2002) that prompting professionals to participate in academic studies is generally difficult. Compared to the study by Hopkins *et al*. (2000), our study involved a fewer number of participants. However, it should be emphasised that each of the two settings had a greater number of participants compared to each of the seven experimental conditions of Hopkins *et al*. In addition, Hopkins *et al*. (2000) sent the experiment material by regular mail to the participants who sent their answers back by regular mail (response rate of 52 percent), whereas the study reported in the current paper had a higher degree of monitoring and control when conducting the experiment. We acknowledge that the use of a real company, Ericsson, as the acquirer, might lead to the possibility that participants were differently affected by their familiarity of the company. According to the background questions asked, no participant was involved in making valuations of the Ericsson share or giving recommendations concerning the Ericsson share. Other limitations relate to the employed tasks. Firstly, the use of a three-points scale with three response options (i.e. 'increase', 'decrease', and 'no effect') restricted the scope of the statistical analysis in that variables could not be simultaneously examined and controlled for, because the requirements for multivariate statistics were not fulfilled (cf., Hair *et al*., 1998). Nevertheless, an advantage with the used scale was that it reflected the reality faced by financial analysts, where they are asked to make categorical judgements shortly after a takeover announcement (i.e., is the value higher, lower or unchanged?). Secondly, the assumption that no impairment losses on goodwill occurred during the three-year forecast period may be questioned, but was motivated by our perception that it is uncommon in practice to predict goodwill impairment losses when the acquisition is expected to develop according to plan. Finally, there is a potential limitation with regard to the reliance on reported accounting numbers. In line with Hopkins *et al*. (2000), our first hypothesis build on the assumption that analysts care about reported accounting numbers. This may not be the case. Therefore, in order to increase the realism, we also included a column on the 'Multiples' screen, where the amortisation of identifiable intangibles acquired in connection with corporate acquisitions was added back ('P/E adjusted', see appendices 2, 6 and 7), since analysts sometimes prefer to exclude such items in earnings per share calculations (Bradshaw and Sloan, 2002; Chen, 2010).

Nonetheless, we argue that the present paper makes contributions to, firstly, the accounting choice literature by investigating how financial analysts are affected by preparers' allocation of acquisition premiums to goodwill versus identifiable intangibles. Empirical-archival research reports inconclusive results concerning positive and negative effects related to the impact of the acquisition-related accounting changes on capital market variables and there have been calls for more behavioural research. The current paper relates to the work of Hopkins *et al.* (2000) who studied the accounting regime prevailing in the US in the late 1990s, when the pooling method was still in use and goodwill was amortised. The current study pertains to a different time period (experiment conducted in 2011) and evaluates the effects of corporate acquisitions on financial analysts' equity valuation judgements under the new accounting regime, more specifically, the IFRS 3 setting. We believe the empirical findings have implications for standard setters, as analysts appear to be using financial statements information in a potentially misleading way, at least during the initial phase. The application of IFRS leaves room for management discretion with regard to the identification of intangibles, and based on the analyst behaviour reported in this paper, there is a risk that management will aim for allocating acquisition premiums to goodwill in order to achieve favourable equity valuation judgements by financial analysts. It may be noted in this context that the study by Wyatt (2005) suggests that managers signal reliable underlying economics when making allocations to intangibles whereas the results of Shalev (2009) indicate that managers view high goodwill allocation as a signal of 'bad news' (see section 2.1). However, the analysts participating in this study responded opposite to such signals and made judgements consistent with a strong focus on reported earnings numbers. Secondly, this paper provides further insight into analysts' information processing in the valuation context. The two-stage design, which is an extension compared to Hopkins *et al*. (2000), was based on descriptions from prior empirical studies where a phase including immediate responses to clients is followed by a phase where deeper analysis takes place. We find that this design has empirical validity and also allows us to identify a group of analysts who have a more limited information search behaviour and who are somewhat reluctant to go beyond exploiting earnings-related information. Thirdly, the study contributes by using a more realistic setting compared to what is common in experimental research. In particular, the design allowed for conducting the experiment with a number of actual sell-side analysts of the case company (the listed company Ericsson), which made it possible to further evaluate the external validity of the results and the experimental design.

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Appendix 1. Pre-acquisition information about the acquirer which was available to participants at Stage 1 and Stage 2

Profit & loss statement						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Net sales	208 930	206 477	203 348	207 120	215 535	218 330
Operating expenses	-183 569	-181 036	-175 768	-177 532	-183 732	-186 180
Profit before depreciation and amortization	**25 361**	**25 441**	**27 580**	**29 588**	**31 803**	**32 150**
Depreciation - Property, plant & Equipment	-3 105	-3 502	-3 296	-3 500	-3 500	-3 500
Amortization - Capitalized development costs	-2 288	-804	-710	-1 000	-1 000	-1 000
Amortization - Other intangibles	-3 280	-3 562	-4 988	-5 000	-5 000	-5 000
Impairment - Goodwill and other intangibles	0	-4 255	-959	0	0	0
Operating profit	**16 688**	**13 318**	**17 627**	**20 088**	**22 303**	**22 650**
Associated companies	-436	-7 400	-1 172	1 164	2 495	5 500
Financial income	3 458	1 874	1 047	1 250	1 250	1 250
Financial expenses	-2 484	-1 549	-1 719	-1 750	-1 750	-1 750
Reported pre-tax profit	**17 226**	**6 243**	**15 783**	**20 752**	**24 298**	**27 650**
Non-controlling interests	-394	-455	-89	-350	-350	-350
Total tax expense	-5 559	-2 116	-4 548	-6 245	-7 780	-8 950
Reported net profit	**11 273**	**3 672**	**11 146**	**14 157**	**16 168**	**18 350**
Adjustments						
Goodwill/other intangibles amort. & impairment	3 280	7 817	5 947	5 000	5 000	5 000
Restructuring charges	6 760	7 004	5 841	0	0	0
Adjusted net profit	**21 313**	**18 493**	**22 934**	**19 157**	**21 168**	**23 350**
Margins, tax and returns						
Operating margin	8,0	6,5	8,7	9,7	10,3	10,4
Pre-tax margin	8,2	3,0	7,8	10,0	11,3	12,7
Tax rate	32,3	33,9	28,8	30,1	32,0	32,4
ROE	8,2	2,6	7,8	9,5	10,3	11,1
ROCE	11,2	4,3	9,6	12,2	13,8	15,0
Growth rates y-o-y (%)						
Net sales	11,3	-1,2	-1,5	1,9	4,1	1,3
Operating profit	-28,7	-20,2	32,4	14,0	11,0	1,6
Pre-tax profit	-43,9	-63,8	152,8	31,5	17,1	13,8
EPS	-48,4	-67,4	203,5	27,0	14,2	13,5
EPS (adjusted)	-14,4	-13,2	24,0	-16,5	10,5	10,3

Balance sheet						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Goodwill	24 877	27 375	27 151	27 151	27 151	27 151
Capitalized development costs	2 782	2 079	3 010	3 310	3 610	3 910
Other intangibles	20 587	18 739	16 658	15 591	14 744	14 497
Property, plant & equipment	9 995	9 606	9 434	10 134	10 834	11 534
Shares in associated companies	7 988	11 578	9 803	10 522	12 588	14 904
Other financial assets	20 930	17 990	17 316	17 316	17 316	17 316
Fixed assets	**87 159**	**87 367**	**83 372**	**84 024**	**86 243**	**89 312**
Inventories	27 836	22 718	29 897	30 220	31 529	32 457
Trade receivables	75 891	66 410	61 127	68 304	70 662	72 042
Other current receivables	19 793	16 590	20 269	18 590	19 100	19 500
Cash and liquid assets	75 005	76 724	87 150	87 200	87 051	90 392
Current assets	**198 525**	**182 442**	**198 443**	**204 314**	**208 342**	**214 391**
Total assets	**285 684**	**269 809**	**281 815**	**288 338**	**294 585**	**303 703**
Shareholders' equity	**140 823**	**139 870**	**145 106**	**152 113**	**161 281**	**170 781**
Non-controlling interests	1 261	1 157	1 679	1 974	2 057	2 207
L/T interest bearing debt	24 939	29 996	26 955	24 465	18 742	19 609
Other long-term liabilities	1 622	2 035	3 296	3 296	3 296	3 296
Pension provisions	9 873	8 533	5 092	5 000	5 000	5 000
Other provisions	311	461	353	353	353	353
Deferred tax	2 738	2 270	2 571	2 270	2 800	3 800
Long-term liabilities	**39 483**	**43 295**	**38 267**	**35 384**	**30 191**	**32 058**
S/T interest bearing debt	5 542	2 124	3 808	3 808	3 808	3 808
Trade payables	23 504	18 864	24 959	26 128	27 730	28 150
Other short-term operating liabilities	75 071	64 499	67 996	68 931	69 518	66 699
Short-term liabilities	**104 117**	**85 487**	**96 763**	**98 867**	**101 056**	**98 657**
Total equity and liabilities	**285 684**	**269 809**	**281 815**	**288 338**	**294 585**	**303 703**
Capital measures and financial position						
Net debt	-34 651	-36 071	-51 295	-53 927	-59 501	-61 975
Working capital	24 945	22 355	18 338	22 055	24 043	29 150
Capital employed	182 438	181 680	182 640	187 360	190 888	201 405
Net debt/equity (%)	-24	-26	-35	-35	-36	-36
Equity/total assets (%)	50	52	52	53	55	57

Valuation						
(SEK)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
No. of shares fully diluted (year-end/Current)	3 200,0	3 200,0	3 200,0	3 200,0	3 200,0	3 200,0
Share price (year-end/current)	58,8	65,9	78,7	82,1	82,1	82,1
Share price (high)	83,5	79,1	88,8	83,0		
Share price (low)	45,0	56,0	66,7	76,0		
Market cap (SEKm)	188 160	210 880	251 680	262 720	262 720	262 720
Net debt (SEKm)	-34 651	-36 071	-51 295	-53 927	-59 501	-61 975
MV associates (SEKm)	10 500	10 500	10 500	10 500	10 500	10 500
MV non-controlling interests (SEKm)	1 261	1 157	1 679	1 974	2 057	2 207
EV (SEKm)	144 270	165 466	191 564	200 267	194 776	192 452
EPS (reported)	3,52	1,15	3,48	4,42	5,05	5,73
EPS (adjusted)	6,66	5,78	7,17	5,99	6,62	7,30
Dividends/share	1,85	2,00	2,25	2,50	2,75	3,00
Dividend yield	3,1	3,0	2,9	3,0	3,3	3,7
Enterprise value/share	45	52	60	63	61	60
Book value/share	44	44	45	48	50	53

Cash flow						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Net profit	11 273	3 672	11 146	14 157	16 168	18 350
Non-cash adjustments	14 712	17 311	12 579	9 605	5 886	6 555
Cash flow before working capital changes	**25 985**	**20 983**	**23 725**	**23 762**	**22 054**	**24 905**
Changes in working capital	-1 985	3 493	2 858	-3 717	-1 988	-5 107
Operating cash flow	**24 000**	**24 476**	**26 583**	**20 045**	**20 066**	**19 798**
Capital expenditures	-5 542	-5 449	-5 330	-5 500	-5 500	-5 500
Asset disposals	2 317	2 563	124	0	0	0
L/T financial investments	-7 155	-17 071	-3 016	0	0	0
Acquisitions/adjustments	1 836	-17 505	-4 319	0	0	0
Free cash flow	**15 456**	**-12 986**	**14 042**	**14 545**	**14 566**	**14 298**
Net loan proceeds	1 032	4 618	1 007	-2 490	-5 723	867
Dividend paid	-8 240	-6 318	-6 677	-7 200	-8 000	-8 800
Share issue	0	0	0	0	0	0
Other	1 255	-328	-306	-4 805	-1 992	-3 024
Net change in cash	**9 503**	**-15 014**	**8 066**	**50**	**-1 149**	**3 341**
Investment cover						
Capex/sales (%)	2,7	2,6	2,6	2,7	2,6	2,5
Capex/depreciation (%)	103	127	133	122	122	122

Main shareholders		
Name	**Votes (%)**	**Capital (%)**
Investor	19,3	5
Industrivärden	13,6	2,3
SHB Pension and Employee Trust	5,3	0,9

Management	
Title	**Name**
COB	Michael Treschow
CEO	Hans Vestberg
CFO	Jan Frykhammar
IR	Åse Lindskog

Company information	
Contact	
Internet	www.ericsson.com
Phone number	(46) 8 719 0000
Fax number	(46) 8 719 1976

Appendix 2. Pre-acquisition information about the acquirer which was available to participants at Stage 1

Multiples

	Price	Market cap	P/E (reported)				P/E (adjusted)			
Peer group 1		**(SEKm)**	**2010**	**2011E**	**2012E**	**2013E**	**2010**	**2011E**	**2012E**	**2013E**
Alcatel	3,34 USD	48 849	-8,0				-14,5	-20,9	17,6	12,8
Cisco Systems Inc	21,71 USD	778 535	16,3				13,5	13,5	11,9	10,9
Nokia	11,11 USD	266 629	16,8				13,7	13,7	12,5	14,1
Qualcomm	54,47 USD	579 324	27,8				22,1	17,9	16,8	16,2
Aggregate		**1 673 336**	**21,4**				**16,7**	**15,6**	**13,5**	**12,9**
Median		422 976	16,6				13,6	13,6	14,6	13,5
Ericsson (Our est.)	82,10 SEK	262 720	23,6	18,6	16,2	14,3	11,5	13,7	12,4	11,3
Ericsson (Consensus est.)	82,10 SEK	262 720	23,6				11,5	13,9	12,6	11,2
Median vs. Our estimates: premium (+) discount (-)			42%				-16%	1%	-15%	-16%
Median vs. Consensus estimates: premium (+) discount (-)			42%				-16%	2%	-14%	-17%

	Price	Market cap	P/E (reported)				P/E (adjusted)			
Peer group 2		**(SEKm)**	**2010**	**2011E**	**2012E**	**2013E**	**2010**	**2011E**	**2012E**	**2013E**
Dell Inc	13,70 USD	171 132	18,8				13,0	9,8	9,2	8,7
Hewlett Packard Co	46,99 USD	665 957	15,0				10,3	9,0	8,2	7,7
IBM	163,92 USD	1 304 481	14,2				14,2	12,5	11,4	10,1
Intel Corp	21,48 USD	771 871	10,5				10,5	10,5	9,8	9,5
Microsoft Corp	27,61 USD	1 500 975	13,1				13,1	10,8	10,0	9,3
Oracle Corporation	32,93 USD	1 076 479	27,2				19,7	15,8	14,3	12,8
Texas Instruments Inc	34,88 USD	263 394	13,3				13,3	13,4	12,6	11,7
Aggregate		**5 754 289**	**14,7**				**13,3**	**11,6**	**10,7**	**9,8**
Median		771 871	14,2				13,1	10,8	10,0	9,5
Ericsson (Our est.)	82,10 SEK	262 720	23,6	18,6	16,2	14,3	11,5	13,7	12,4	11,3
Ericsson (Consensus est.)	82,10 SEK	262 720	23,6				11,5	13,9	12,6	11,2
Median vs. Our estimates: premium (+) discount (-)			66%				-13%	27%	24%	18%
Median vs. Consensus estimates: premium (+) discount (-)			66%				-13%	28%	26%	17%

Appendix 3. Information about the target firm (XX Corp) which was available to participants at Stage 1 and Stage 2

Profit & loss statement						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Net sales	35 868	48 919	62 458	66 837	72 184	76 515
Operating expenses	-33 161	-45 188	-56 639	-60 010	-65 424	-69 378
Profit before depreciation and amortization	**2 707**	**3 731**	**5 818**	**6 826**	**6 760**	**7 137**
Depreciation - Property, plant & Equipment	-455	-556	-751	-838	-905	-960
Amortization - Capitalized development costs	-46	-58	-112	-146	-158	-167
Amortization - Other intangibles	-44	-51	-48	-27	-27	-27
Impairment - Goodwill and other intangibles	0	0	0	0	0	0
Operating profit	**2 161**	**3 066**	**4 907**	**5 815**	**5 670**	**5 982**
Associated companies	21	19	29	44	57	62
Financial income	43	110	126	165	174	182
Financial expenses	-291	-653	-842	-788	-827	-869
Reported pre-tax profit	**1 934**	**2 542**	**4 221**	**5 237**	**5 073**	**5 358**
Non-controlling interests	-177	-238	-266	-232	-243	-255
Total tax expense	-545	-532	-804	-899	-863	-1 623
Reported net profit	**1 212**	**1 771**	**3 151**	**4 106**	**3 967**	**3 479**
Margins, tax and returns						
Operating margin	6,0	6,3	7,9	8,7	7,9	7,8
Pre-tax margin	5,4	5,2	6,8	7,8	7,0	7,0
Tax rate	28,2	20,9	19,0	17,2	17,0	30,3
ROE	n.m.	13,4	18,8	20,3	16,6	13,3
ROCE	n.m.	11,9	14,3	14,4	13,0	13,1
Growth rates y-o-y (%)						
Net sales	8,6	36,4	27,7	7,0	8,0	6,0
Operating profit	-8,9	41,9	60,1	18,5	-2,5	5,5
Pre-tax profit	-12,6	31,4	66,1	24,1	-3,1	5,6
EPS	n.m.	46,1	77,9	30,3	-3,4	-12,3

Balance sheet						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Goodwill	0	0	0	0	0	0
Capitalized development costs	220	675	1 075	1 193	1 288	1 366
Other intangibles	185	197	155	72	72	72
Property, plant & equipment	3 596	5 853	6 671	7 346	7 934	8 410
Shares in associated companies	326	210	506	924	1 058	1 112
Other financial assets	3 560	2 318	5 884	6 490	6 675	6 893
Fixed assets	**7 887**	**9 253**	**14 291**	**16 025**	**17 027**	**17 852**
Inventories	6 513	10 042	10 245	11 913	12 866	13 638
Trade receivables	7 693	13 439	17 484	19 779	21 362	22 644
Other current receivables	8 566	14 102	17 246	17 966	19 403	20 568
Cash and liquid assets	7 880	11 238	15 367	12 546	11 588	12 501
Current assets	**30 652**	**48 821**	**60 342**	**62 205**	**65 219**	**69 350**
Total assets	**38 540**	**58 074**	**74 633**	**78 230**	**82 247**	**87 203**
Shareholders' equity	**10 502**	**15 978**	**17 585**	**22 847**	**24 954**	**27 274**
Non-controlling interests	540	1 255	1 441	1 196	1 288	1 379
L/T interest bearing debt	4 656	6 285	9 537	8 770	9 640	10 210
Other long-term liabilities	70	94	275	310	392	411
Pension provisions	30	41	40	38	39	41
Deferred tax	40	0	4	4	5	5
Long-term liabilities	**4 797**	**6 420**	**9 856**	**9 121**	**10 076**	**10 667**
S/T interest bearing debt	6 056	8 275	10 300	11 867	10 075	9 878
Trade payables	10 505	18 010	23 324	22 157	23 930	25 365
Other short-term operating liabilities	6 140	8 136	12 127	11 041	11 924	12 640
Short-term liabilities	**22 701**	**34 421**	**45 751**	**45 065**	**45 928**	**47 883**
Total equity and liabilities	**38 540**	**58 074**	**74 633**	**78 230**	**82 247**	**87 203**
Capital measures and financial position						
Net debt	2 863	3 363	4 510	8 129	8 166	7 628
Working capital	6 128	11 437	9 524	16 461	17 778	18 844
Capital employed	21 785	31 834	38 903	44 718	45 996	48 782
Net debt/equity (%)	26	20	24	34	31	27
Equity/total assets (%)	29	30	25	31	32	33

Valuation						
SEK	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
No. of shares fully diluted (year-end)	446,0	446,0	446,0	446,0	446,0	446,0
No. of shares fully diluted (average)	446,0	446,0	446,0	446,0	446,0	446,0
Share price (year-end)	210,0	107,0	169,5	165,5	165,5	165,5
Share price (high)	250,2	224,0	175,0	174,2		
Share price (low)	132,0	82,0	106,0	108,7		
EPS (reported)	2,72	3,97	7,07	9,21	8,89	7,80
Dividends/share	0,24	0,28	0,33	0,80	0,30	0,30
Dividend yield	0,1	0,3	0,2	0,5	0,2	0,2
Enterprise value/share	216	115	180	184	184	183
Book value/share	24	36	39	51	56	61

Cash flow						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Net profit	1 212	1 771	3 151	4 106	3 967	3 479
Non-cash adjustments	1 199	1 527	2 964	-740	160	885
Cash flow before working capital changes	**2 412**	**3 298**	**6 115**	**3 366**	**4 127**	**4 364**
Changes in working capital	-3 042	-456	-1 430	-6 731	-1 317	-1 067
Operating cash flow	**-630**	**2 842**	**4 685**	**-3 365**	**2 810**	**3 297**
Capital expenditures	-1 477	-1 810	-2 098	-2 687	-1 746	-1 680
Asset disposals	25	50	0	28	36	11
L/T financial investments	0	-159	-992	-1 128	-185	-218
Acquisitions/adjustments	0	161	-86	-440	-90	-10
Free cash flow	**-2 082**	**1 085**	**1 509**	**-7 592**	**825**	**1 400**
Net loan proceeds	2 430	2 233	2 558	1 923	-922	373
Dividend paid	0	0	0	0	-860	-860
Share issue	0	0	0	3 718	0	0
Other	446	41	61	0	0	0
Net change in cash	**794**	**3 358**	**4 128**	**-1 951**	**-958**	**913**
Investment cover						
Capex/sales (%)	4,1	3,7	3,4	4,0	2,4	2,2
Capex/depreciation (%)	295	295	243	273	164	149

Appendix 4. Post-acquisition information about the acquirer which was available to participants at Stage 1 and Stage 2

Profit & loss statement ('Goodwill Only', GO version)						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Net sales	208 930	206 477	203 348	273 957	287 719	294 845
Operating expenses	-183 569	-181 036	-175 768	-237 542	-249 156	-255 558
Synergies				1 500	2 400	2 800
Integration costs				-1 500	-800	-400
Profit before depreciation and amortization	**25 361**	**25 441**	**27 580**	**36 414**	**40 163**	**41 687**
Depreciation - Property, plant & Equipment	-3 105	-3 502	-3 296	-4 338	-4 405	-4 460
Amortization - Capitalized development costs	-2 288	-804	-710	-1 146	-1 158	-1 167
Amortization - Other intangibles	-3 280	-3 562	-4 988	-5 027	-5 027	-5 027
Impairment - Goodwill and other intangibles	0	-4 255	-959	0	0	0
Operating profit	**16 688**	**13 318**	**17 627**	**25 903**	**29 573**	**31 032**
Associated companies	-436	-7 400	-1 172	1 208	2 552	5 562
Financial income	3 458	1 874	1 047	462	470	478
Financial expenses	-2 484	-1 549	-1 719	-4 897	-4 937	-4 978
Reported pre-tax profit	**17 226**	**6 243**	**15 783**	**22 676**	**27 658**	**32 095**
Non-controlling interests	-394	-455	-89	-582	-593	-605
Total tax expense	-5 559	-2 116	-4 548	-6 273	-8 233	-10 394
Reported net profit	**11 273**	**3 672**	**11 146**	**15 821**	**18 832**	**21 096**
Adjustments						
Goodwill/other intangibles amort. & impairment	3 280	7 817	5 947	5 027	5 027	5 027
Restructuring charges	6 760	7 004	5 841	1 500	800	400
Adjusted net profit	**21 313**	**18 493**	**22 934**	**22 348**	**24 659**	**26 523**
Margins, tax and returns						
Operating margin	8,0	6,5	8,7	9,5	10,3	10,5
Pre-tax margin	8,2	3,0	7,8	8,3	9,6	10,9
Tax rate	32,3	33,9	28,8	27,7	29,8	32,4
ROE	17,2	2,6	7,8	10,6	11,9	12,5
ROCE	20,9	4,3	9,6	12,5	12,4	13,7
Growth rates y-o-y (%)						
Net sales	11,3	-1,2	-1,5	34,7	5,0	2,5
Operating profit	-28,7	-20,2	32,4	47,0	14,2	4,9
Pre-tax profit	-43,9	-63,8	152,8	43,7	22,0	16,0
EPS	n.m.	-67,4	203,5	41,9	19,0	12,0
EPS (adjusted)	n.m.	-13,2	24,0	-2,6	10,3	7,6

Profit & loss statement ('Identifiable Intangibles Recognised', IIR version)						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Net sales	208 930	206 477	203 348	273 957	287 719	294 845
Operating expenses	-183 569	-181 036	-175 768	-237 542	-249 156	-255 558
Synergies				1 500	2 400	2 800
Integration costs				-1 500	-800	-400
Profit before depreciation and amortization	**25 361**	**25 441**	**27 580**	**36 414**	**40 163**	**41 687**
Depreciation - Property, plant & Equipment	-3 105	-3 502	-3 296	-4 338	-4 405	-4 460
Amortization - Capitalized development costs	-2 288	-804	-710	-1 146	-1 158	-1 167
Amortization - Other intangibles	-3 280	-3 562	-4 988	-10 027	-10 027	-10 027
Impairment - Goodwill and other intangibles	0	-4 255	-959	0	0	0
Operating profit	**16 688**	**13 318**	**17 627**	**20 903**	**24 573**	**26 032**
Associated companies	-436	-7 400	-1 172	1 208	2 552	5 562
Financial income	3 458	1 874	1 047	462	470	478
Financial expenses	-2 484	-1 549	-1 719	-4 897	-4 937	-4 978
Reported pre-tax profit	**17 226**	**6 243**	**15 783**	**17 676**	**22 658**	**27 095**
Non-controlling interests	-394	-455	-89	-582	-593	-605
Total tax expense	-5 559	-2 116	-4 548	-4 832	-6 792	-8 953
Reported net profit	**11 273**	**3 672**	**11 146**	**12 262**	**15 273**	**17 537**
Adjustments						
Goodwill/other intangibles amort. & impairment	3 280	7 817	5 947	10 027	10 027	10 027
Restructuring charges	6 760	7 004	5 841	1 500	800	400
Adjusted net profit	**21 313**	**18 493**	**22 934**	**23 789**	**26 100**	**27 964**
Margins, tax and returns						
Operating margin	8,0	6,5	8,7	7,6	8,5	8,8
Pre-tax margin	8,2	3,0	7,8	6,5	7,9	9,2
Tax rate	32,3	33,9	28,8	27,3	30,0	33,0
ROE	17,2	2,6	7,8	8,4	10,0	10,9
ROCE	20,9	4,3	9,6	10,3	10,8	12,2
Growth rates y-o-y (%)						
Net sales	11,3	-1,2	-1,5	34,7	5,0	2,5
Operating profit	-28,7	-20,2	32,4	18,6	17,6	5,9
Pre-tax profit	-43,9	-63,8	152,8	12,0	28,2	19,6
EPS	n.m.	-67,4	203,5	10,0	24,6	14,8
EPS (adjusted)	n.m.	-13,2	24,0	3,7	9,7	7,1

Balance sheet ('Goodwill Only', GO version)						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Goodwill	24 877	27 375	27 151	104 704	104 704	104 704
Capitalized development costs	2 782	2 079	3 010	4 503	4 898	5 276
Other intangibles	20 587	18 739	16 658	15 663	14 816	14 569
Property, plant & equipment	9 995	9 606	9 434	17 480	18 768	19 944
Shares in associated companies	7 988	11 578	9 803	11 446	13 646	16 016
Other financial assets	20 930	17 990	17 316	23 806	23 991	24 209
Fixed assets	**87 159**	**87 367**	**83 372**	**177 602**	**180 823**	**184 717**
Inventories	27 836	22 718	29 897	42 133	44 395	46 095
Trade receivables	75 891	66 410	61 127	88 083	92 024	94 686
Other current receivables	19 793	16 590	20 269	36 556	38 503	40 068
Cash and liquid assets	75 005	76 724	87 150	49 546	48 439	52 693
Current assets	**198 525**	**182 442**	**198 443**	**216 319**	**223 361**	**233 541**
Total assets	**285 684**	**269 809**	**281 815**	**393 921**	**404 185**	**418 259**
Shareholders' equity	**140 823**	**139 870**	**145 106**	**152 113**	**163 389**	**175 208**
Non-controlling interests	1 261	1 157	1 679	3 170	3 345	3 586
L/T interest bearing debt	24 939	29 996	26 955	83 435	78 582	80 019
Other long-term liabilities	1 622	2 035	3 296	3 606	3 688	3 707
Pension provisions	9 873	8 533	5 092	5 038	5 039	5 041
Other provisions	311	461	353	353	353	353
Deferred tax	2 738	2 270	2 571	2 274	2 805	3 805
Long-term liabilities	**39 483**	**43 295**	**38 267**	**94 705**	**90 467**	**92 925**
S/T interest bearing debt	5 542	2 124	3 808	15 675	13 883	13 686
Trade payables	23 504	18 864	24 959	48 286	51 660	53 515
Other short-term operating liabilities	75 071	64 499	67 996	79 972	81 442	79 339
Short-term liabilities	**104 117**	**85 487**	**96 763**	**143 933**	**146 984**	**146 540**
Total equity and liabilities	**285 684**	**269 809**	**281 815**	**393 921**	**404 185**	**418 259**
Capital measures and financial position						
Net debt	-34 651	-36 071	-51 295	54 602	49 065	46 053
Working capital	24 945	22 355	18 338	38 515	41 821	47 994
Capital employed	182 438	181 680	182 640	259 430	264 237	277 540
Net debt/equity (%)	-24	-26	-35	35	29	26
Equity/total assets (%)	50	52	52	39	41	43

Balance sheet ('Identifiable Intangibles Recognised', IIR version)						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Goodwill	24 877	27 375	27 151	76 230	76 230	76 230
Capitalized development costs	2 782	2 079	3 010	4 503	4 898	5 276
Other intangibles	20 587	18 739	16 658	50 663	44 816	39 569
Property, plant & equipment	9 995	9 606	9 434	17 480	18 768	19 944
Shares in associated companies	7 988	11 578	9 803	11 446	13 646	16 016
Other financial assets	20 930	17 990	17 316	23 806	23 991	24 209
Fixed assets	**87 159**	**87 367**	**83 372**	**184 128**	**182 350**	**181 244**
Inventories	27 836	22 718	29 897	42 133	44 395	46 095
Trade receivables	75 891	66 410	61 127	88 083	92 024	94 686
Other current receivables	19 793	16 590	20 269	36 556	38 503	40 068
Cash and liquid assets	75 005	76 724	87 150	49 546	48 439	52 693
Current assets	**198 525**	**182 442**	**198 443**	**216 319**	**223 361**	**233 541**
Total assets	**285 684**	**269 809**	**281 815**	**400 447**	**405 711**	**414 785**
Shareholders' equity	**140 823**	**139 870**	**145 106**	**148 553**	**156 270**	**164 530**
Non-controlling interests	1 261	1 157	1 679	3 170	3 345	3 586
L/T interest bearing debt	24 939	29 996	26 955	83 435	78 582	80 019
Other long-term liabilities	1 622	2 035	3 296	3 606	3 688	3 707
Pension provisions	9 873	8 533	5 092	5 038	5 039	5 041
Other provisions	311	461	353	353	353	353
Deferred tax	2 738	2 270	2 571	12 359	11 450	11 009
Long-term liabilities	**39 483**	**43 295**	**38 267**	**104 791**	**99 112**	**100 129**
S/T interest bearing debt	5 542	2 124	3 808	15 675	13 883	13 686
Trade payables	23 504	18 864	24 959	48 286	51 660	53 515
Other short-term operating liabilities	75 071	64 499	67 996	79 972	81 442	79 339
Short-term liabilities	**104 117**	**85 487**	**96 763**	**143 933**	**146 984**	**146 540**
Total equity and liabilities	**285 684**	**269 809**	**281 815**	**400 447**	**405 711**	**414 785**
Capital measures and financial position						
Net debt	-34 651	-36 071	-51 295	54 602	49 065	46 053
Working capital	24 945	22 355	18 338	38 515	41 821	47 994
Capital employed	182 438	181 680	182 640	255 871	257 118	266 862
Net debt/equity (%)	-24	-26	-35	36	31	27
Equity/total assets (%)	50	52	52	38	39	41

Appendix 4, cont. Post-acquisition information about the acquirer which was available to participants at Stage 1 and Stage 2

Cash flow statement (GO version)						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Net profit	11 273	3 672	11 146	15 821	18 832	21 096
Non-cash adjustments	14 712	17 311	12 579	10 265	5 498	4 289
Cash flow before working capital changes	**25 985**	**20 983**	**23 725**	**26 086**	**24 330**	**25 385**
Changes in working capital	-1 985	3 493	2 858	-5 448	-3 306	-6 174
Operating cash flow	**24 000**	**24 476**	**26 583**	**20 638**	**21 024**	**19 211**
Capital expenditures	-5 542	-5 449	-5 330	-8 187	-7 246	-7 180
Asset disposals	2 317	2 563	124	28	36	11
L/T financial investments	-7 155	-17 071	-3 016	-1 128	-185	-218
Acquisitions/adjustments	1 836	-17 505	-4 319	-87 854	-90	-10
Free cash flow	**15 456**	**-12 986**	**14 042**	**-76 503**	**13 539**	**11 814**
Net loan proceeds	1 032	4 618	1 007	47 710	-6 645	1 240
Dividend paid	-8 240	-6 318	-6 677	-7 200	-8 000	-8 800
Share issue	0	0	0	0	0	0
Other	1 255	-328	-306	648	0	0
Net change in cash	**9 503**	**-15 014**	**8 066**	**-35 345**	**-1 107**	**4 254**
Investment cover						
Capex/sales (%)	2,7	2,6	2,6	3,0	2,5	2,4
Capex/depreciation (%)	103	127	133	149	130	128

Cash flow statement (IIR version)						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
Net profit	11 273	3 672	11 146	12 262	15 273	17 537
Non-cash adjustments	14 712	17 311	12 579	13 824	9 057	7 848
Cash flow before working capital changes	**25 985**	**20 983**	**23 725**	**26 086**	**24 330**	**25 385**
Changes in working capital	-1 985	3 493	2 858	-5 448	-3 306	-6 174
Operating cash flow	**24 000**	**24 476**	**26 583**	**20 638**	**21 024**	**19 211**
Capital expenditures	-5 542	-5 449	-5 330	-8 187	-7 246	-7 180
Asset disposals	2 317	2 563	124	28	36	11
L/T financial investments	-7 155	-17 071	-3 016	-1 128	-185	-218
Acquisitions/adjustments	1 836	-17 505	-4 319	-87 854	-90	-10
Free cash flow	**15 456**	**-12 986**	**14 042**	**-76 503**	**13 539**	**11 814**
Net loan proceeds	1 032	4 618	1 007	47 710	-6 645	1 240
Dividend paid	-8 240	-6 318	-6 677	-7 200	-8 000	-8 800
Share issue	0	0	0	0	0	0
Other	1 255	-328	-306	648	0	0
Net change in cash	**9 503**	**-15 014**	**8 066**	**-35 345**	**-1 107**	**4 254**
Investment cover						
Capex/sales (%)	2,7	2,6	2,6	3,0	2,5	2,4
Capex/depreciation (%)	103	127	133	149	130	128

Valuation (GO version)						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
No. of shares fully diluted (year-end/Current)	3 200,0	3 200,0	3 200,0	3 200,0	3 200,0	3 200,0
Share price (year-end/current)	58,8	65,9	78,7	82,1	82,1	82,1
Share price (high)	83,5	79,1	88,8	83,0		
Share price (low)	45,0	56,0	66,7	76,0		
Market cap (SEKm)	188 160	210 880	251 680	262 720	262 720	262 720
Net debt (SEKm)	-34 651	-36 071	-51 295	54 602	49 065	46 053
MV associates (SEKm)	10 500	10 500	10 500	11 424	11 558	11 612
MV non-controlling interests (SEKm)	1 261	1 157	1 679	3 170	3 345	3 586
EV (SEKm)	144 270	165 466	191 564	309 068	303 572	300 747
EPS (reported)	3,52	1,15	3,48	4,94	5,88	6,59
EPS (adjusted)	6,66	5,78	7,17	6,98	7,71	8,29
Dividends/share	1,85	2,00	2,25	2,50	2,75	3,00
Dividend yield	3,1	3,0	2,9	3,0	3,3	3,7
Enterprise value/share	45	52	60	97	95	94
Book value/share	44	44	45	48	51	55

Valuation (IIR version)						
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**
No. of shares fully diluted (year-end/Current)	3 200,0	3 200,0	3 200,0	3 200,0	3 200,0	3 200,0
Share price (year-end/current)	58,8	65,9	78,7	82,1	82,1	82,1
Share price (high)	83,5	79,1	88,8	83,0		
Share price (low)	45,0	56,0	66,7	76,0		
Market cap (SEKm)	188 160	210 880	251 680	262 720	262 720	262 720
Net debt (SEKm)	-34 651	-36 071	-51 295	54 602	49 065	46 053
MV associates (SEKm)	10 500	10 500	10 500	11 424	11 558	11 612
MV non-controlling interests (SEKm)	1 261	1 157	1 679	3 170	3 345	3 586
EV (SEKm)	144 270	165 466	191 564	309 068	303 572	300 747
EPS (reported)	3,52	1,15	3,48	3,83	4,77	5,48
EPS (adjusted)	6,66	5,78	7,17	7,43	8,16	8,74
Dividends/share	1,85	2,00	2,25	2,50	2,75	3,00
Dividend yield	3,1	3,0	2,9	3,0	3,3	3,7
Enterprise value/share	45	52	60	97	95	94
Book value/share	44	44	45	46	49	51

Appendix 5. Decision interface at stage 1

Decision Interface

** Q2. How does the acquisition affect your valuation of the Ericsson stock (share)?*

- a) It will increase my valuation
- b) It will decrease my valuation
- c) It will not affect my valuation

** Q3. How certain are you of this conclusion?*

- a) Absolutely certain
- b) Very certain
- c) Fairly certain
- d) Fairly uncertain
- e) Very uncertain
- f) Absolutely uncertain

Q4. Please describe briefly the reasoning behind your conclusion of how the acquisition would affect your valuation of the Ericsson stock (share).

** Mandatory fields*

Submit

Appendix 6. Pre-acquisition information about the acquirer which was available to participants at Stage 2

Multiples

Peer group 1	Price	Market cap (SEKm)	EV/Sales 2010	EV/Sales 2011E	EV/Sales 2012E	EV/Sales 2013E	P/E (reported) 2010	P/E (reported) 2011E	P/E (reported) 2012E	P/E (reported) 2013E	P/E (adjusted) 2010	P/E (adjusted) 2011E	P/E (adjusted) 2012E	P/E (adjusted) 2013E
Alcatel	3,34 USD	48 849	0,37	0,38	0,36		-8,0				-14,5	-20,9	17,6	12,8
Cisco Systems Inc	21,71 USD	778 535	2,40	2,21	2,00		16,3				13,5	13,5	11,9	10,9
Nokia	11,11 USD	266 629	0,55	0,53	0,50		16,8				13,7	13,7	12,5	14,1
Qualcomm	54,47 USD	579 324	7,24	5,76	5,25		27,8				22,1	17,9	16,8	16,2
Aggregate		**1 673 336**	**1,65**	**1,55**	**1,44**		**21,4**				**16,7**	**15,6**	**13,5**	**12,9**
Median		422 976	1,48	1,37	1,25		16,6				13,6	13,6	14,6	13,5
Ericsson (Our est.)	82,10 SEK	262 720	0,98	0,97	0,93	0,92	23,6	18,6	16,2	14,3	11,5	13,7	12,4	11,3
Ericsson (Consensus est.)	82,10 SEK	262 720	0,98	0,97	0,90		23,6				11,5	13,9	12,6	11,2
Median vs. Our estimates: premium (+) discount (-)			-33%	-29%	-26%		42%				-16%	1%	-15%	-16%
Median vs. Consensus estimates: premium (+) discount (-)			-33%	-29%	-28%		42%				-16%	2%	-14%	-17%

Peer group 2	Price	Market cap (SEKm)	EV/Sales 2010	EV/Sales 2011E	EV/Sales 2012E	EV/Sales 2013E	P/E (reported) 2010	P/E (reported) 2011E	P/E (reported) 2012E	P/E (reported) 2013E	P/E (adjusted) 2010	P/E (adjusted) 2011E	P/E (adjusted) 2012E	P/E (adjusted) 2013E
Dell Inc	13,70 USD	171 132	0,36	0,31	0,30		18,8				13,0	9,8	9,2	8,7
Hewlett Packard Co	46,99 USD	665 957	0,91	0,86	0,82		15,0				10,3	9,0	8,2	7,7
IBM	163,92 USD	1 304 481	2,18	2,08	2,00		14,2				14,2	12,5	11,4	10,1
Intel Corp	21,48 USD	771 871	2,29	2,02	1,89		10,5				10,5	10,5	9,8	9,5
Microsoft Corp	27,61 USD	1 500 975	3,27	2,93	2,76		13,1				13,1	10,8	10,0	9,3
Oracle Corporation	32,93 USD	1 076 479	5,95	4,51	4,19		27,2				19,7	15,8	14,3	12,8
Texas Instruments Inc	34,88 USD	263 394	2,72	2,64	2,57		13,3				13,3	13,4	12,6	11,7
Aggregate		**5 754 289**	**2,00**	**1,82**	**1,73**		**14,7**				**13,3**	**11,6**	**10,7**	**9,8**
Median		771 871	2,29	2,08	2,00		14,2				13,1	10,8	10,0	9,5
Ericsson (Our est.)	82,10 SEK	262 720	0,98	0,97	0,93	0,92	23,6	18,6	16,2	14,3	11,5	13,7	12,4	11,3
Ericsson (Consensus est.)	82,10 SEK	262 720	0,98	0,97	0,90		23,6				11,5	13,9	12,6	11,2
Median vs. Our estimates: premium (+) discount (-)			-57%	-54%	-53%		66%				-13%	27%	24%	18%
Median vs. Consensus estimates: premium (+) discount (-)			-57%	-53%	-55%		66%				-13%	28%	26%	17%

DCF analysis

DCF model assumptions

(SEKm)	2008	2009	2010	2011E	2012E	2013E	2018E	2024E	2031E
Net sales	208 930	206 477	203 348	207 120	215 535	218 330	253 104	268 675	330 437
EBITDA	25 361	25 441	27 580	29 588	31 803	32 150	36 700	40 301	47 583
EBITA	19 968	21 135	23 574	25 088	27 303	27 650	27 335	30 360	35 357
NOPLAT	11 702	9 707	12 550	12 642	14 153	13 800	15 604	18 821	23 180
FCFF	15 165	22 437	20 155	12 925	16 165	12 693	21 427	21 783	23 715

%	2000-10	2005-10	2010	2011E	2012E	2013E	2014-18E	2019-24E	2025-31E
Net sales CAGR, %	-3	6	-2	2	4	1	3	1	3
EBITDA growth	0	-5	8	7	7	1	2	2	3
EBITA growth	3	-7	12	6	9	1	1	2	2
NOPLAT growth	1	-10	29	1	12	-2	1	2	2
FCFF growth	-	-5	-10	-36	25	-21	6	8	2
EBITDA margin	13,7	17,2	13,6	14,3	14,8	14,7	14,9	14,8	14,6
EBITA margin	10,0	13,4	11,6	12,1	12,7	12,7	11,2	11,1	10,9
NOPLAT margin	5,7	9,4	6,2	6,1	6,6	6,3	6,5	6,8	7,1
FCFF margin	7,3	8,6	9,9	6,2	7,5	5,8	8,4	7,6	7,3
Capex/Sales	3,1	2,8	2,6	2,7	2,6	2,5	3,2	4,0	4,0
Capex/Depreciation	77	79	133	122	122	122	92	114	124
Net working cap/Sales	12,0	12,0	9,0	10,6	11,2	13,4	15,0	17,0	17,0

WACC assumptions, %		Calculation of DCF, SEKm		DCF checkpoints, %	
Risk-free interest rate	4,0	PV operating C/F	239 180	Sustainable growth	3,0
Equity market risk premium	5,0	Net debt	-51 295	Sust EBITDA margin	14,4
Extra risk premium	-	Market value associates	10 500	Sust EBITA margin	10,8
Equity beta (x)	1,0	Market value minorities	1 679	Terminal value/DCF	28
Cost of equity	9,0	DCF value	299 296		
Pre-tax cost of debt	6,5	**DCF/share (SEK)**	93,5	**Share price potentatial**	**13,9**
Equity weight	100				
WACC	**9,0**				

Appendix 7. Post-acquisition information about the acquirer which was available to participants at Stage 2

Multiples ('Goodwill Only', GO version)

	Price	Market cap	EV/Sales				P/E (reported)				P/E (adjusted)			
Peer group 1		(SEKm)	2010	2011E	2012E	2013E	2010	2011E	2012E	2013E	2010	2011E	2012E	2013E
Alcatel	3,34 USD	48 849	0,37	0,38	0,36		-8,0				-14,5	-20,9	17,6	12,8
Cisco Systems Inc	21,71 USD	778 535	2,40	2,21	2,00		16,3				13,5	13,5	11,9	10,9
Nokia	11,11 USD	266 629	0,55	0,53	0,50		16,8				13,7	13,7	12,5	14,1
Qualcomm	54,47 USD	579 324	7,24	5,76	5,25		27,8				22,1	17,9	16,8	16,2
Aggregate		**1 673 336**	**1,65**	**1,55**	**1,44**		**21,4**				**16,7**	**15,6**	**13,5**	**12,9**
Median		422 976	1,48	1,37	1,25		16,6				13,6	13,6	14,6	13,5
Ericsson (Our est.)	82,10 SEK	262 720	1,52	1,13	1,07	1,05	23,6	16,6	14,0	12,5	11,5	11,8	10,7	9,9
Ericsson (Consensus est.)	82,10 SEK	262 720	0,98	0,97	0,90		23,6				11,5	13,9	12,6	11,2
Median vs. Our estimates: premium (+) discount (-)			3%	-18%	-14%		42%				-16%	-14%	-27%	-26%
Median vs. Consensus estimates: premium (+) discount (-)			-33%	-29%	-28%		42%				-16%	2%	-14%	-17%

	Price	Market cap	EV/Sales				P/E (reported)				P/E (adjusted)			
Peer group 1		(SEKm)	2010	2011E	2012E	2013E	2010	2011E	2012E	2013E	2010	2011E	2012E	2013E
Dell Inc	13,70 USD	171 132	0,36	0,31	0,30		18,8				13,0	9,8	9,2	8,7
Hewlett Packard Co	46,99 USD	665 957	0,91	0,86	0,82		15,0				10,3	9,0	8,2	7,7
IBM	163,92 USD	1 304 481	2,18	2,08	2,00		14,2				14,2	12,5	11,4	10,1
Intel Corp	21,48 USD	771 871	2,29	2,02	1,89		10,5				10,5	10,5	9,8	9,5
Microsoft Corp	27,61 USD	1 500 975	3,27	2,93	2,76		13,1				13,1	10,8	10,0	9,3
Oracle Corporation	32,93 USD	1 076 479	5,95	4,51	4,19		27,2				19,7	15,8	14,3	12,8
Texas Instruments Inc	34,88 USD	263 394	2,72	2,64	2,57		13,3				13,3	13,4	12,6	11,7
Aggregate		**5 754 289**	**2,00**	**1,82**	**1,73**		**14,7**				**13,3**	**11,6**	**10,7**	**9,8**
Median		771 871	2,29	2,08	2,00		14,2				13,1	10,8	10,0	9,5
Ericsson (Our est.)	82,10 SEK	262 720	1,52	1,13	1,07	1,05	23,6	16,6	14,0	12,5	11,5	11,8	10,7	9,9
Ericsson (Consensus est.)	82,10 SEK	262 720	0,98	0,97	0,90		23,6				11,5	13,9	12,6	11,2
Median vs. Our estimates: premium (+) discount (-)			-34%	-46%	-46%		66%				-13%	9%	7%	4%
Median vs. Consensus estimates: premium (+) discount (-)			-57%	-53%	-55%		66%				-13%	28%	26%	17%

Multiples ('Identifiable Intangibles Recognised', IIR version)

	Price	Market cap	EV/Sales				P/E (reported)				P/E (adjusted)			
Peer group 1	(local)	(SEKm)	2010	2011E	2012E	2013E	2010	2011E	2012E	2013E	2010	2011E	2012E	2013E
Alcatel	3,34 USD	48 849	0,37	0,38	0,36		-8,0				-14,5	-20,9	17,6	12,8
Cisco Systems Inc	21,71 USD	778 535	2,40	2,21	2,00		16,3				13,5	13,5	11,9	10,9
Nokia	11,11 USD	266 629	0,55	0,53	0,50		16,8				13,7	13,7	12,5	14,1
Qualcomm	54,47 USD	579 324	7,24	5,76	5,25		27,8				22,1	17,9	16,8	16,2
Aggregate		**1 673 336**	**1,65**	**1,55**	**1,44**		**21,4**				**16,7**	**15,6**	**13,5**	**12,9**
Median		422 976	1,48	1,37	1,25		16,6				13,6	13,6	14,6	13,5
Ericsson (Our est.)	82,10 SEK	262 720	1,52	1,13	1,07	1,05	23,6	21,4	17,2	15,0	11,5	11,0	10,1	9,4
Ericsson (Consensus est.)	82,10 SEK	262 720	0,98	0,97	0,90		23,6				11,5	13,9	12,6	11,2
Median vs. Our estimates: premium (+) discount (-)			3%	-18%	-14%		42%				-16%	-19%	-31%	-30%
Median vs. Consensus estimates: premium (+) discount (-)			-33%	-29%	-28%		42%				-16%	2%	-14%	-17%

	Price	Market cap	EV/Sales				P/E (reported)				P/E (adjusted)			
Peer group 1	(local)	(SEKm)	2010	2011E	2012E	2013E	2010	2011E	2012E	2013E	2010	2011E	2012E	2013E
Dell Inc	13,70 USD	171 132	0,36	0,31	0,30		18,8				13,0	9,8	9,2	8,7
Hewlett Packard Co	46,99 USD	665 957	0,91	0,86	0,82		15,0				10,3	9,0	8,2	7,7
IBM	163,92 USD	1 304 481	2,18	2,08	2,00		14,2				14,2	12,5	11,4	10,1
Intel Corp	21,48 USD	771 871	2,29	2,02	1,89		10,5				10,5	10,5	9,8	9,5
Microsoft Corp	27,61 USD	1 500 975	3,27	2,93	2,76		13,1				13,1	10,8	10,0	9,3
Oracle Corporation	32,93 USD	1 076 479	5,95	4,51	4,19		27,2				19,7	15,8	14,3	12,8
Texas Instruments Inc	34,88 USD	263 394	2,72	2,64	2,57		13,3				13,3	13,4	12,6	11,7
Aggregate		**5 754 289**	**2,00**	**1,82**	**1,73**		**14,7**				**13,3**	**11,6**	**10,7**	**9,8**
Median		771 871	2,29	2,08	2,00		14,2				13,1	10,8	10,0	9,5
Ericsson (Our est.)	82,10 SEK	262 720	1,52	1,13	1,07	1,05	23,6	21,4	17,2	15,0	11,5	11,0	10,1	9,4
Ericsson (Consensus est.)	82,10 SEK	262 720	0,98	0,97	0,90		23,6				11,5	13,9	12,6	11,2
Median vs. Our estimates: premium (+) discount (-)			-34%	-46%	-46%		66%				-13%	2%	1%	-2%
Median vs. Consensus estimates: premium (+) discount (-)			-57%	-53%	-55%		66%				-13%	28%	26%	17%

Appendix 7, cont. Post-acquisition information about the acquirer which was available to participants at Stage 2

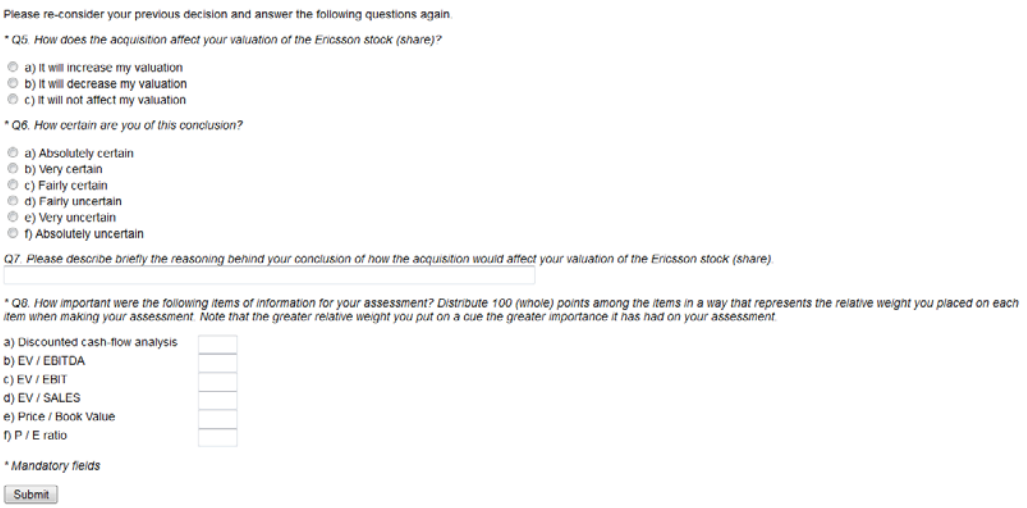
DCF analysis (GO and IIR versions)

DCF model assumptions									
(SEKm)	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**	**2018E**	**2024E**	**2031E**
Net sales	208 930	206 477	203 348	273 957	287 719	294 845	335 220	347 471	415 862
EBITDA	25 361	25 441	27 580	36 414	40 163	41 687	52 294	55 943	64 459
EBITA	19 968	21 135	23 574	30 930	34 600	36 059	39 891	43 086	49 072
NOPLAT	11 702	9 707	12 550	17 725	20 249	20 002	24 419	27 391	32 472
FCFF	15 165	22 437	20 155	14 629	20 323	17 313	29 366	29 435	31 502
%	**2000-10**	**2005-10**	**2010**	**2011E**	**2012E**	**2013E**	**2014-18E**	**2019-24E**	**2025-31E**
Net sales CAGR, %	-3	6	-2	35	5	2	3	1	3
EBITDA growth	0	-5	8	32	10	4	1	1	2
EBITA growth	3	-7	12	31	12	4	1	1	2
NOPLAT growth	1	-10	29	41	14	-1	1	2	2
FCFF growth	-	-5	-10	-27	39	-15	-2	7	2
EBITDA margin	13,7	17,2	13,6	17,9	19,8	20,5	16,0	15,9	15,7
EBITA margin	10,0	13,4	11,6	15,2	17,0	17,7	12,3	12,2	12,0
NOPLAT margin	5,7	9,4	6,2	8,7	10,0	9,8	7,6	7,7	7,9
FCFF margin	7,3	8,6	9,9	7,2	10,0	8,5	9,3	8,0	7,7
Capex/Sales	3,1	2,8	2,6	2,7	2,6	2,5	3,2	4,0	4,0
Capex/Depreciation	77	79	133	122	122	122	101	123	133
Net working cap/Sales	12,0	12,0	9,0	8,1	8,4	9,9	15,0	17,0	17,0

WACC assumptions, %		**Calculation of DCF, SEKm**		**DCF checkpoints, %**	
Risk-free interest rate	4,0	PV operating C/F	351 992	Sustainable growth	3,0
Equity market risk premium	5,0	Net debt	60 055	Sust EBITDA margin	14,4
Extra risk premium	-	Market value associates	10 529	Sust EBITA margin	10,8
Equity beta (x)	1,0	Market value minorities	3 170	Terminal value/DCF	29
Cost of equity	9,0	DCF value	299 296		
Pre-tax cost of debt	6,5	**DCF/share (SEK)**	93,5	**Share price potentatial**	**13,9**
Equity weight	85				
WACC	**8,3**				

Appendix 8. Decision interface at stage 2

Decision Interface



Please re-consider your previous decision and answer the following questions again.

** Q5. How does the acquisition affect your valuation of the Ericsson stock (share)?*

- a) It will increase my valuation
- b) It will decrease my valuation
- c) It will not affect my valuation

** Q6. How certain are you of this conclusion?*

- a) Absolutely certain
- b) Very certain
- c) Fairly certain
- d) Fairly uncertain
- e) Very uncertain
- f) Absolutely uncertain

Q7. Please describe briefly the reasoning behind your conclusion of how the acquisition would affect your valuation of the Ericsson stock (share).

** Q8. How important were the following items of information for your assessment? Distribute 100 (whole) points among the items in a way that represents the relative weight you placed on each item when making your assessment. Note that the greater relative weight you put on a cue the greater importance it has had on your assessment.*

a) Discounted cash-flow analysis
b) EV / EBITDA
c) EV / EBIT
d) EV / SALES
e) Price / Book Value
f) P / E ratio

** Mandatory fields*

Submit

Table 1. Effects of the acquisition on different valuation measures

	GO-setting (goodwill only)	IIR-setting (identifiable intangible assets recognised)
EV/EBITDA	Increase	Increase
EV/EBIT	Increase	Increase
EV/SALES	Increase	Increase
PRICE/BV	Decrease	Increase
P/E ratio	Decrease	Increase
DCF analysis	Unchanged	Unchanged

Table 2. Descriptive statistics of the observed responses at Stage 1 of the experiment: frequencies (in percent) of the equity valuation judgements made by the participants in the two groups ('goodwill only', GO, and 'identifiable intangibles recognised', IIR)

	Equity valuation judgements at Stage 1 (basic information)		
Experimental condition	Decrease	Increase	No effect
GO-setting (n = 21)	4 (19%)	14 (67%)	3 (14%)
IIR-setting (n =19)	13 (68%)	5 (26%)	1 (5%)

Table 3. Descriptive statistics of the observed responses at Stage 2 of the experiment: frequencies (in percent) of the equity valuation judgements made by the participants in the two groups ('goodwill only', GO, and 'identifiable intangibles recognised', IIR)

	Equity valuation judgements at Stage 2 (additional information)		
Experimental condition	Decrease	Increase	No effect
GO-setting (n = 21)	4 (19%)	11 (52%)	6 (29%)
IIR-setting (n =19)	8 (42%)	7 (37%)	4 (21%)

Table 4. Participant responses tabulated across the two stages of the experiment (GO = goodwill only; IIR = identifiable intangibles recognised)

Experimental condition	Equity valuation judgements at Stage 1	Equity valuation judgements at Stage 2		
		Decrease	Increase	No effect
GO-setting	Decrease (n = 4)	2[a]	2	0
	Increase (n = 14)	2	9[a]	3
	No effect (n = 3)	0	0	3[a]
IIR-setting	Decrease (n = 13)	7[a]	2	4
	Increase (n = 5)	1	4[a]	0
	No effect (n = 1)	0	1	0[a]

Notes:

[a] Adding up the participant numbers of the cells that are denoted with the superscript a gives the total number of participants that kept their evaluations throughout the two stages of the experiment despite being exposed to additional information.

Table 5. Descriptive statistics for the participants' self-reported information use of valuation measures. Participants were asked to distribute 100 points across the six measures

Valuation measure	Mean (points)	Standard deviation (points)	Number of participants stating 50 -100 points	Number of participants stating 0 -25 points
DCF	38.82	30.30	11	15
P/E	17.55	20.43	4	29
EV/EBITDA	14.50	15.57	2	35
EV/EBIT	13.88	16.13	3	33
EV/SALES	7.75	9.01	0	39
Price/BV	7.50	10.58	1	38

Notes: DCF refers to discounted cash flow valuation; P/E refers to share price divided by earnings per share; EV refers to enterprise value, measured as the sum of market capitalisation and debt; EBITDA refers to earnings before interest, taxes, depreciation, and amortisation; BV refers to the book value of shareholders' equity (per share).

Table 6. Profiles and the responses of the Ericsson analysts (GO = goodwill only; IIR = identifiable intangibles recognised)

Analysts	1	2	3	4	5	6
Experimental condition	GO	GO	GO	GO	IIR	IIR
Age	44	40	46	45	35	39
Years of experience	17	10	21	17	10	10
Years following Ericsson	1	8	19	17	8	10
Type of analyst	sell-side	sell-side	sell-side	independent	sell-side	sell-side
Current recommendation	buy	buy	neutral	neutral	sell	buy
Stage 1: Equity valuation judgement	No effect	Decrease	Increase	No effect	Decrease	Decrease
Stage 2: Equity valuation judgement	No effect	Decrease	Increase	No effect	Decrease	No effect
Information use[a]						
DCF	70	20	25			85
EV/EBITDA	20	10	10	10		10
EV/EBIT		30	5	80		
EV/SALES	5	30				
Price/BV			10			
P/E	5	10	50	10	100	5

Notes:

[a] This term refers to the weight placed on different valuation measures when making the equity valuation judgement (100 point scale). DCF refers to discounted cash flow valuation; P/E refers to share price divided by earnings per share; EV refers to enterprise value, measured as the sum of market capitalisation and debt; EBITDA refers to earnings before interest, taxes, depreciation, and amortisation; BV refers to the book value of shareholders' equity (per share).

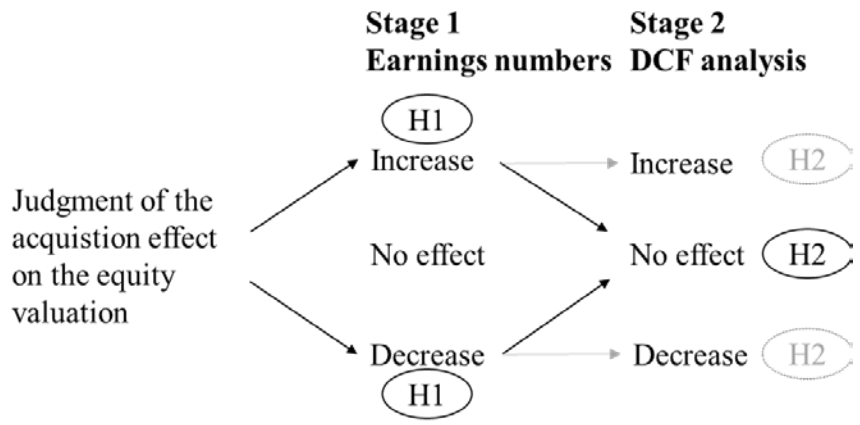


Figure 1. Overview of the research design and hypotheses

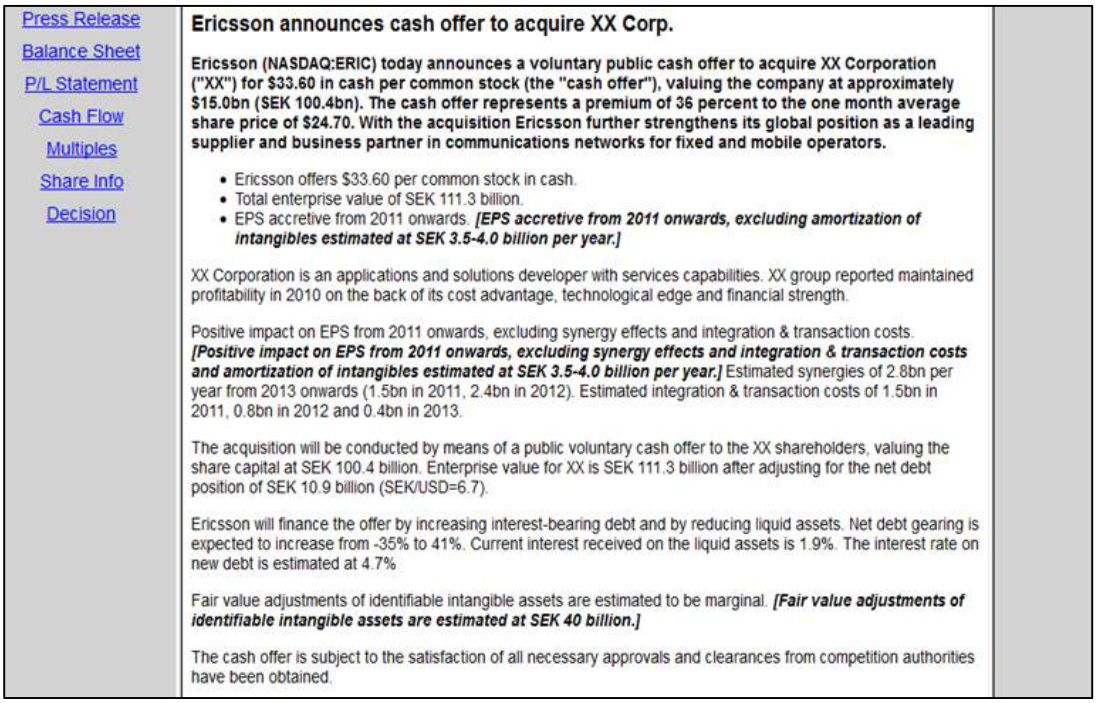


Figure 2. Press releases announcing the corporate acquisition; 'Goodwill Only' (GO) version with the 'Identifiable Intangibles Recognised'(IIR) version in [] brackets and bold text

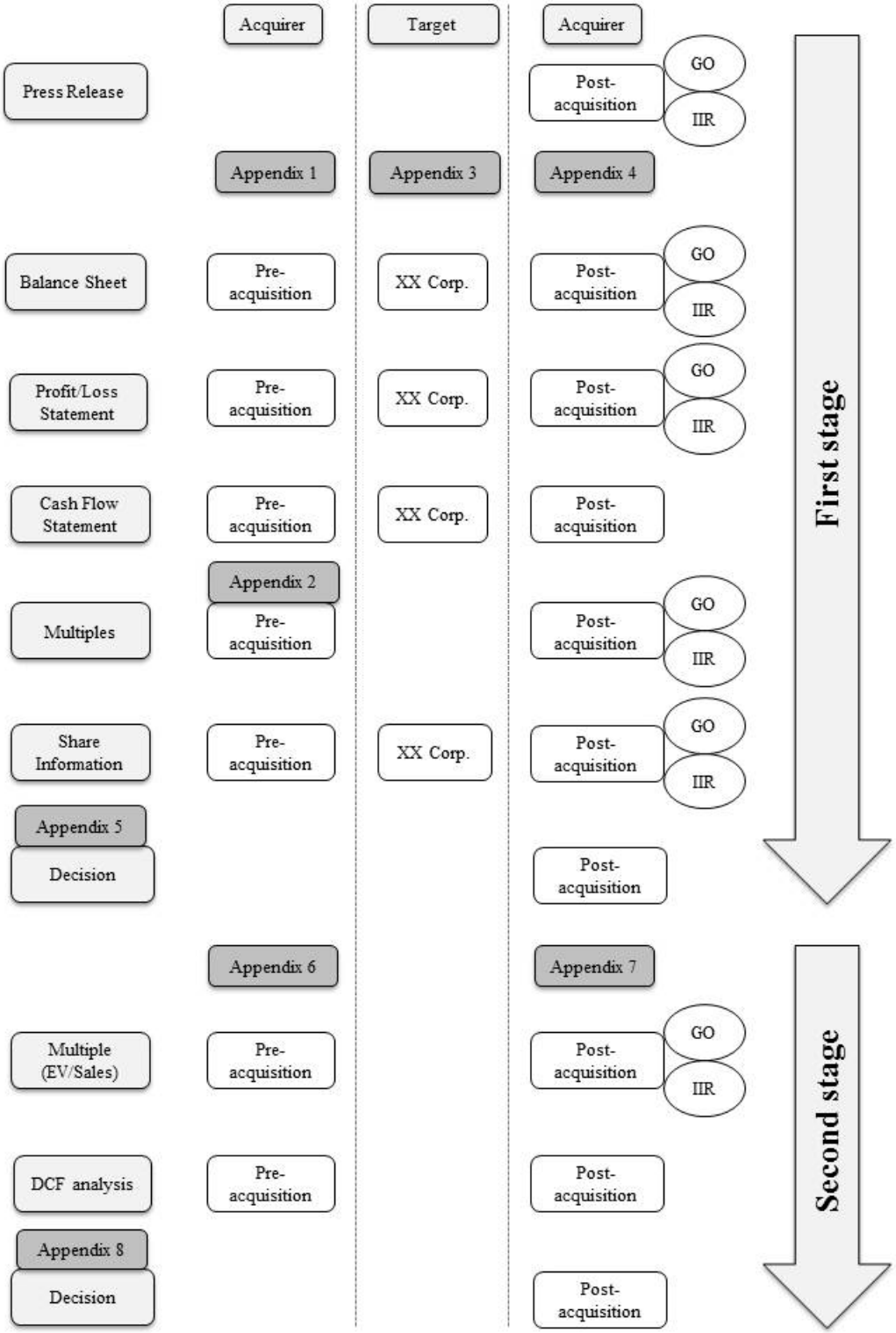


Figure 3. Overview of the experimental material. Information provided at each stage can be found in appendices 1–8. Both versions are provided wherever the material had been manipulated ('goodwill only', GO, and 'identifiable intangibles recognised', IIR)