# **Chapter Eight**

# Analysis of Capital Market Treatment of Accounting Diversity

Relating back to the model in Figure 1.1, this chapter analyzes the relationship between content and receiver. The content is the accounting data that is transmitted from the sender to the receiver. This content varies depending on in which country it originates (see Section 4.3 for an overview of how it may vary). In this chapter, content is annual reports produced by listed, Swedish companies, and receivers are non-Swedish financial analysts.

Differences in national context may cause variability in both content and receivers. However, in this chapter we focus on the variability in content only. National variability in receivers is not the primary interest in this chapter, but is instead covered in Chapter Nine. We do, however, touch upon the issue of whether responses are specific to analysts covering certain industries, or to analysts working in certain types of financial firms.

The empirical studies used in this chapter are interviews with non-Swedish financial analysts. Analysts' reports that cover Swedish companies, and are issued by non-Swedish financial firms, are also used here.

The research issue is operationalized as indicated in operationalization number 3 in Section 1.3. That entails studying whether analysts are affected by international accounting diversity when they attempt to compare the values of companies from different countries.

Two separate research methodologies are used in this chapter, i.e. both predefined categories and categories generated in the analysis are used. Predefined categories are defined by the questionnaire used in the interviews (Figure 3.1), and this analysis is presented in Section 8.1. The empirical material is also used to generate categories (Section 8.2), in which an attempt is made at understanding the analysis process performed by financial analysts when valuing stocks. Implications for this process on effects of international accounting diversity are then analyzed. The chapter concludes with an attempt at integrating results from the two methodologies, in Section 8.3.

There are more quotes from interview protocols provided in Section 8.1 than in Section 8.2. The reason for this is that quotes tend to be more important in a detailed analysis of interviews, than in a holistic type of analysis (Holme and Solvang, 1991, p. 120).

# 8.1. Analysis Based on Interview Questionnaire

This approach can be seen as a survey-type analysis, where the focus is on how many respondents answer in a certain way. Consequently, some type of quantification of responses is possible. If the selection of respondents is random, statistical techniques can be used to make statements about the entire population from which respondents are selected. As noted in Section 5.1, the sample used here is not randomly selected, but results obtained are unlikely to be caused by a selection bias.

The interviews analyzed here are those that are included in the primary receiver study, as described in Section 5.1. That is, they are interviews with *analysts*, and emphasize analysts covering *Swedish* companies. In order to test the validity of responses they are compared to what analysts actually write when they issue reports.

This section follows the structure of the interview questionnaire used relatively closely, and the questionnaire is shown in Figure 3.1. Responses to all questions in the questionnaire are not included, since they are not all directly applicable to the stated research issue.

It should be noted that the questionnaire is open-ended, that is it did not have alternative answers that were fixed in advance. The responses below should be interpreted with this in mind. Thus, if an analyst stated that a specific method of analysis was used, or a specific piece of information was used, it suggests a certain importance is given to that item. It does not mean, however, that the analysts not mentioning that item did not use the item at all.

All analysts included in this study use fundamental analysis<sup>84</sup>. This is consistent with previous studies that have found fundamental analysis to be by far the most common among analysts (Arnold et al, 1984; Olbert, 1992).

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<sup>&</sup>lt;sup>84</sup> Three main analysis approaches are often identified, namely fundamental, technical, and quantitative analysis. Fundamental analysis is derived from Graham and Dodd (1989), and their suggestion that investors search for 'intrinsic value' (ibid., pp. 48-51). Technical analysis is based on historical stock prices. Quantitative analysis includes, for example, beta analysis (based on CAPM), and the use of time series models (Pindyck and Rubinfeld, 1981).

The answers are grouped into five areas. First, we have the general use of annual reports by analysts (Section 8.1.1). Second, there are replies related to specific issues with Swedish annual reports (Section 8.1.2). Third, analysts give their opinion on the desirability of accounting harmonization (Section 8.1.3). Fourth, differences in analysis related to the industry followed by analysts are covered (Section 8.1.4). Fifth, there are differences among analysts related to which country the analysts come from (Section 8.1.5). The fourth and fifth areas are included in order to study the issue of the results being driven by an industry or a country bias in the sample used in this section 8.5.

# 8.1.1. General Use of Annual Reports

Three questions are covered in this section. These are the *importance* of annual reports in the analysis, what *parts* of annual reports are used, and *how* annual reports are used in the analysis.

Responses to the question of the importance of annual reports are classified into four categories. What the categories are, as well as the number of analysts classified into each category can be seen in Table 8.1.

Table 8.1. Importance of Annual Reports				
Categories	Essential	Useful with other information sources	Used only as reference	Not used
Number of Analysts	4	9	2	0

A few quotes<sup>86</sup> are provided here as examples of typical statements relating to each of the categories. Responses classified as 'essential' included the following quotes:

The annual report is very important in equity research (R4).

The financial statements are the most important source of information for analysts (R15).

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<sup>&</sup>lt;sup>85</sup> Another potential dimension for biases is what type of financial firm analysts work at. As shown in Section 4.2, analysts may be either sell-side or buy-side. However, since there is only one buy-side analyst included in the sample, it is not seen as relevant to study differences by type of analyst when looking for biases. Rather, this issue is covered in Section 8.2.2 and

<sup>&</sup>lt;sup>86</sup> Quotes are not literal interview quotes, since no tape recorder was used during the interviews. Rather, the quotes are excerpts from the interview protocols.

Typical statements for the category 'useful with other information sources' are:

Financial statements are important ... other sources are used to make forecasts. Talks with company management is perhaps the most important such source (R5).

In summary, it is an imperfect world. To get around this fact, people try to use as many sources as possible, and obtain as much information as possible (R9).

Examples of qoutes indicating that annual reports are 'used only as a reference' include:

Our long-term emphasis leads to less focus on accounting numbers, and more on strategy. Trust in management is important ... For individual companies, market share, strategy and management are analyzed (R3).

Responses in this study are consistent with findings in previous studies, such as Day (1986, p. 306), and Chang et al (1983). These studies indicate that the annual report is an important source of information for both US and UK analysts.

All 15 analysts do use the annual report in their analysis, most of them to quite a significant extent. From this follows that international accounting diversity may be an issue. If these analysts had not used annual reports, accounting diversity would be unlikely as an issue.

Table 8.2. Use of parts of annual reports			
Item	Number of analysts		
	mentioning item		
Income Statement	11		
Balance Sheet	7		
Management Report	4		
Statement of Cash Flows	2		
Financial Statement Notes	2		
Quarterly Figures	1		
Product Segment Information	1		
Dividend Payout	1		
Parent Company Financial Statements	0		
Audit Report	0		

The next question analysts were asked is what parts of the annual reports are used. Table 8.2 shows the number of analysts that mentioned each of the parts shown.

The relative importance of the income statement is most likely understated in Table 8.2, since some of the analysts mentioning both income statement and balance sheet state that the income statement is the more important of the two. A typical quote indicating this difference is:

All financial statements are looked at ... However, since the main focus is on forecasting EPS, the profit and loss account is more important than the others (R8).

Several analysts indicate that they are interested in cash flows, but that it is not relevant to use the reported statement of cash flows, as indicated by the following quotes:

Reported cash flow is not very important. The problem is that there are many different definitions of it. Therefore, analysts prefer to calculate cash flows themselves (R4).

The statement of cash flow is not used much, since it often just consists of net income with depreciation added (R6).

The findings coincide with several previous studies. Govindarajan (1980) shows that analysts focus on earnings rather than cash flows when they analyze financial statements. Biggs (1984) shows that the income statement is more important than the balance sheet or cash flow statement in company analysis for US analysts. The same result is reached by Bouwman et al (1987) and Day (1986) for UK analysts, by Vergoosen (1993) for Dutch analysts, and by Olbert (1992) for Swedish analysts.

These findings have possible implications for the effects of international accounting diversity. For example, the accounting diversity that affects the income statement is most likely to have an impact on analysts. Effects on balance sheet items may also have some importance, whereas effects on the statement of cash flows is not very important. Possibly, a conclusion is that Swedish companies should improve their statements of cash flows, since the statements are not useful for analysts as currently presented. Rather, analysts do create their own statements. Further, the legal requirement in Sweden that parent company financial statements must be included appears to be irrelevant for non-Swedish analysts. It is probably more useful to provide, for example, quarterly data than parent company information.

The third question covered in this section is how financial statements are used in the analysis process. An overview of responses is provided here, while a deeper analysis of the process is discussed in Section 8.2. Table 8.3 shows the number of analysts who mentioned certain uses.

Table 8.3. How financial statements are used				
Item	Number of analysts			
Income statement used as a basis for forecasts	13			
Of which uses adjusted numbers	4			
Of which uses product segment data	4			
Balance sheet used as a basis for forecasts	5			
Statement of cash flows used as a basis for forecasts	1			
Financial statements are used as a basis for calculation of	6			
ratios				
Financial statements are used to give a warning signal	1			
Financial statements are used to ascertain the company culture	1			

The results in Table 8.3 are consistent with results in Table 8.2 in that they both display the importance of the income statement. Almost all analysts state that they do make a forecast of the income statement, using either unadjusted or adjusted figures. Some also forecast the balance sheet, and one makes a forecast of reported statement of cash flows. See Section 8.2 for a more comprehensive discussion of how financial statements are used in the forecasting process.

Interviewees indicate other ways in which financial statements can be used. One way is to calculate financial ratios, which enable analysts to make industry-wide comparisons. Another way is to, as pointed out by one analyst, use financial statements to ascertain management intentions, and whether management can be trusted. This latter approach is further discussed in Chapter Nine.

Examples of statements that are classified as using income statement as a basis for forecasts include:

The model for analyzing financial statements includes all line items. Basically, the financial statements are reproduced into the future (R12).

The focus in the analysis ... is the income statement. An attempt is made at projecting every line item on the income statement (R14).

From the findings we conclude that international accounting diversity has a potential impact on the forecasting process. According to the framework developed in Section 1.3, which is supported by statements presented here, financial statements are used as a basis for forecasts<sup>87</sup>. This basis is then affected by international accounting diversity, and may thereby vary between countries. This impact would be most significant for accounting diversity affecting the income statement, but would also have a potential impact for balance sheet items.

# 8.1.2. Specific Issues with Swedish Annual Reports

This section includes three questions that deal specifically with Swedish annual reports, and with the analysis of Swedish companies. The first issue is the perceived quality of Swedish annual reports. The second question concerns whether - and if so, how - analysts use US GAAP and IAS information provided by Swedish companies. Finally, the question is raised whether analysts apply a different analysis method to Swedish companies than to companies from other countries (such as the analyst's home country).

Analysts' perception of the quality of annual reports is shown in Table 8.4. The table shows the number of analysts that mentioned each specific item or reply. The responses do not add up to 15, since not all analysts replied to all questions.

Table 8.4. Perceived quality of Swedish annual reports				
Item	Possible Responses	Number of Analysts		
General quality of Swedish annual	Best report analyzed	2		
reports	Good (no problems)	6		
	Not good	1		
Change noted in Swedish annual	No	5		
report over time	Yes	1		
Problem areas	Accounting	1		
	principles			
	Disclosure	1		

Typical statements for responses classified as 'good quality of annual reports (no problems)' include:

*Nothing is really missing in Swedish annual reports* (R5).

<sup>&</sup>lt;sup>87</sup> A more detailed model and discussion of how financial statements are used by analysts is provided in Section 8.2.

Swedish annual reports have a relatively high quality (R10).

In general, analysts see Swedish annual reports as being of high, or very high, quality. The level of quality is also seen as consistent over time, since most respondents have not noted any significant change in the Swedish annual reports. Most respondents not noting any change over time have followed Swedish companies for 3-4 years. The analyst that had noted a change, on the other hand, has followed a Swedish company for 13 years. It may also be interesting to point out which the perceived problem areas were. The accounting principles problem was the calculation of deferred taxes in Sweden. The disclosure problem was that it is difficult to know what numbers go into the financial income and expense items on the income statement.

We may conclude that this study is good news for Swedish accountants. That is because analysts generally do not see any specific problems with Swedish annual reports. This may be because Swedish companies have already adapted their accounting to the requirements of non-Swedish analysts. Responses to the question if any change was noted over time is interesting because it indicates that the adaptation of Swedish accounting has occurred recently. The analyst who has followed a Swedish company the longest, has noted improvements over time, whereas the others have not.

The results from analysts' interviews are corroborated by interviews with Swedish company representatives (the sender study). A common statement among these representatives was that the number of questions on Swedish accounting to the companies from analysts is limited. A few years ago, there used to be more questions, but now it has decreased.

It should be pointed out that all responses in the receiver study analyzed here relate to the very largest Swedish companies, i.e. the analysts follow large Swedish companies. With a broader selection of analysis objects, including some smaller Swedish companies, the responses may have been different.

Some Swedish companies provide US GAAP information, and it is usually done in a footnote to the financial statements. A few companies also provide IAS information. The next question studied is how analysts use this information. Table 8.5 shows how many analysts use US GAAP/IAS<sup>88</sup> information,

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<sup>&</sup>lt;sup>88</sup> One could argue that there are important differences between US GAAP and IAS, especially in terms of how detailed the accounting standards are. Therefore, US GAAP should provide a higher level of certainty than IAS in terms of what accounting principles companies' actually follow. In the analysis in this chapter, however, no distinction is made between the two reporting frameworks. This is because US GAAP/IAS is primarily used by analysts as a check on the Swedish accounting numbers, and for that purpose analysts do not

and in what way they use it (responses do not add to 15, since not all interviewees commented on this issue).

Table 8.5. Use of US GAAP and IAS information				
Item	Number of Analysts			
US GAAP/IAS used as a basis for the analysis	1			
Used as a guarantor of quality of financial	6			
statements				
US GAAP/IAS numbers add information	1			
US GAAP/IAS reconciliations are looked at	2			
Not used	2			

If US GAAP/IAS is used as a basis for the analysis, it means that they are seen as the primary figures, replacing the Swedish numbers. For those analysts that see US GAAP/IAS as a guarantor of the quality of financial statements, US GAAP/IAS is more reliable than financial statements prepared according to Swedish accounting rules, even though they are willing to use the Swedish numbers in their analysis. The third and fourth items (US GAAP/IAS adds information, and reconciliations are looked at) are very close. The difference is that the analysts that are classified as looking at the reconciliation indicated that they did not find any valuable information in this reconciliation.

Statements indicating that US GAAP/IAS numbers are 'used as a guarantor of the quality of financial statements' include:

The IAS statement provides information on how useful the financial statements are (R1).

It probably makes me feel more comfortable using the financial statements (R8).

The following statement was classified as 'US GAAP/IAS reconciliations are looked at':

I look at the reconciliation to US GAAP in order to see what is included there, but in most cases there is no significant information in this reconciliation (R14).

The implication of these results for Swedish companies is that the inclusion of US GAAP/IAS reconciliations is appreciated by analysts. The results

distinguish clearly between US GAAP and IAS. It seems to be more important that an accounting framework about which analysts have knowledge is used, then what the exact properties of this framework are.

indicate that it is not because they actually use the reconciled numbers, but because they do not trust Swedish accounting to the same extent that they trust US GAAP/IAS. Thus, if the reconciliation does not show anything alarming, the Swedish numbers can be used. The fact that Swedish numbers are used is consistent with the findings in Table 8.4, that there are basically no problems with Swedish annual reports.

The findings here show some of the complexity of studying capital market effects of international accounting diversity. One interpretation of the results is that the specific accounting principles used to produce financial statements are less important than trust in the overall accounting system. This is based on the observation that analysts generally do not see the US GAAP/IAS as important per se, but rather as an 'insurance policy' against the potential for poor quality in the Swedish accounting system. This may be interpreted as a lack of trust in the Swedish accounting system. Another interpretation is that accounting diversity is a disclosure issue, where analysts are more comfortable with companies providing the reconciliation because they receive added information about those companies.

The last question addressed in this section is whether Swedish companies are analyzed differently than companies from other countries. Table 8.6 shows the results for this question.

Table 8.6. Is the Same Method Used to Analyze Companies from Different Countries?			
Response Number of Analysts			
Yes, there is no difference	6		
Implicit adjustments are made for accounting diversity	5		
No, explicit, quantitative adjustments are made	3		

Quotes indicating that 'implicit adjustments are made' include:

Investors usually have some idea of the differences in accounting, and how they affect various items. They have no scientific way of comparison, however. It is basically impossible to restate scientifically. In the end, there is uncertainty when comparing companies in different countries (R9).

Astra may be more conservative than US companies in its treatment of deferred taxes. Some of the deferred taxes, for which reserves are set up, will most likely never be paid. Therefore, Astra's after-tax earnings would go up if the liability method was used (R12).

Among those that indicate that quantitative adjustments are made, it is usually done for items related to goodwill.

The findings for this question are consistent with the previous question, in that it appears to be difficult to quantify the effects of accounting diversity. However, more than half of the analysts that responded to this question made either explicit or implicit adjustments, which would be a strong suggestion that accounting diversity is a real issue for analysts. However, quantifying the effect that this issue has on company analysis performed is not trivial.

# 8.1.3. Desirability of Accounting Harmonization

The question of whether analysts see international accounting harmonization as desirable is analyzed in this section. The number of interviewees responding yes and no, respectively, to this question are shown in Table 8.7 (one analyst did not directly respond to this question).

Table 8.7. Is Accounting Harmonization Desirable?		
Response Number of Analysts		
Analysts saying yes	13	
Analysts saying no	1	

The 'no' answer in Table 8.7 is based on a belief that accounting is not very important in company analysis, and therefore the level of international harmonization is more or less irrelevant.

Examples of quotes indicating that accounting harmonization is desirable are:

Accounting can be difficult to understand. Therefore, local brokers are used. Brokers with a US or UK background might miss something in, for example, Sweden (R3).

The ideal situation for analysts is when companies have no accounting options or choices ... An example of unnecessary choices is provided by goodwill in Europe (R4).

International harmonization of accounting would definitely be helpful. A clear yes to that question (R6).

It would be better if all companies in the World used the same accounting principles, but that is not going to happen (R14).

The fact that such a large number of interviewees see harmonization as desirable may be seen as a strong indication that accounting diversity does affect analysts. It should be noted, however, that harmonization may be seen as desirable on a more general level, and the diversity may not affect the specific analysis performed on Swedish companies. For example, some analysts discuss harmonization in terms of German or Swiss accounting. Examples of this include:

German companies have odd-looking financial statements. Swiss companies understate their profits in order to get lower taxes (R13).

In the case of German accounting, however, there are real differences, and the analysis of German companies is adjusted for this fact ... the analysis is adjusted for the existence of hidden earnings (R1).

Thus, the question is not whether the *respondent* is affected by international accounting diversity, but rather whether harmonization is desirable on a *general* level. On the other hand, if interviewees believe that nobody is affected by accounting diversity, than why would harmonization be seen as desirable?

# 8.1.4. Industry Differences

In this section, the issue of industry effects is studied, i.e. to what extent results in the previous three sections are driven by industry factors. The discussion concerns the industry of the companies analyzed by interviewees. The idea behind including this section is that there may be differences in how company analysis is done that are related to the industry of the company analyzed. As a background, the analysis specialization of the 15 analysts included in the study is shown in Table 8.8.

As can be seen from Table 8.8, electronics/technology and pharmaceuticals are dominant industries. This is largely due to the significant interest by non-Swedish analysts in Ericsson and Astra. Thus, replies may be driven by analysis methods specific to these two industries.

For pharmaceuticals, analysts focus on the long-term nature of the business, and on research and development (R&D) activities, as shown in the following quotes:

Table 8.8. Specialization of Analysts		
Item		Number of Analysts

Treatment of Accounting Diversity

Industry specialists	12
Of which - Electronics/Technology	5
- Pharmaceuticals	4
- Electrical	1
- Transportation	1
- Other	1
Country specialists	2
Functional specialists	1

For pharmaceutical companies ... quarterly earnings do not mean much, or provide much relevant information. Annual earnings is the optimal item for these companies (R1).

R&D and the R&D pipeline is described in a separate document, focusing solely on this line item. R&D information is then used as a very important item for forecasting future earnings (R12).

The focus on R&D may mean there is less use of current financial statements. It may also mean that the assets included on the balance sheet are less relevant. This is because accumulated R&D is not capitalized, and thus not shown as an asset. The following quote covers these issues fairly well:

Fixed assets are low for pharmaceuticals ... The real value is in intellectual property, in terms of patents and new drug development (R13).

Electronics/technology is also an industry which can be assumed to be focused on intangible rather than tangible assets, and these assets may not be included on the balance sheet. This view is reflected by the following comment:

I do not spend much time on the balance sheet, since it is not relevant for a company like Ericsson (R7).

Thus, we may expect the analysts that follow pharmaceuticals and electronics to see the annual report as less important, and that they use the balance sheet less than analysts in other industries. To see whether this is true, Tables 8.9, 8.10, and 8.11 show the data from Tables 8.1, 8.2, and 8.3, divided by industry.

Table 8.9. Importance of Annual Report by Industry				
	Analysts in	Analysts in	Other analysts	
	electronics	pharmaceuticals		

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Essential	1	2	1
Useful with other information	4	1	4
Used only as reference	0	1	1

There is no clear pattern in Table 8.9 that would indicate any differences in importance of annual report by groups of analysts.

Table 8.10. Use of Parts of Annual Reports by Industry					
Item	Item Analysts in Analysts in Other analysts electronics pharmaceuticals				
Income statement	4	4	3		
Balance sheet	2	2	3		

Table 8.11. How Financial Statements Are Used, By Industry			
Item	Analysts in	Analysts in	Other
	electronics	pharmaceuticals	analysts
Income statement used as basis	4	4	5
Balance sheet used as basis	0	2	3

Tables 8.10 and 8.11 show that there is a tendency for analysts that follow companies in electronics/technology and pharmaceuticals to use the balance sheet to a lesser degree than other analysts. Related to this is the issue of how representative the survey results are for the analyst population. To some degree, the findings that the income statement is by far the most important financial statement are driven by the high number of analysts in electronics/technology and pharmaceuticals. On the other hand, it may be that the entire analyst population has a high degree of analysts in these industries. Then, the results would still be representative.

An analyst population is identified in Tables 4.3 and 4.4, based on Nelson's Directory and Investext. Nelson's Directory gives the number of analysts following each Swedish company, but does not show how active the analysts are. Investext, on the other hand, gives information about the level of activity. According to Nelson's Directory, Ericsson and Astra have the largest following, and after those two come Procordia and Volvo. Thus, many of the analysts in the population follow electronics and pharmaceuticals. The same pattern is apparent in the Investext selection, where there are more reports listed on Ericsson and Astra than for any other companies. To conclude, there is some support for the emphasis on electronics and pharmaceuticals. However, while these two industries make up 75% of the industry experts in this sample, they make up a smaller

percentage in the overall population, as evidenced by Table 4.1. Therefore, it is possible that results in this Section 8.1 are affected by industry-specific factors.

# 8.1.5. Country Differences

The effect of industry differences is discussed in the previous section. Here, the discussion shifts to whether results are driven by country differences among analysts. The issue of differences among analysts based on country of residence is also discussed in Section 8.2, and in Chapter Nine.

In order to test whether there are any substantial differences in the use of annual reports between analysts from different countries, Tables 8.12, 8.13, and 8.14 show the data in Tables 8.1, 8.2, and 8.3 divided by country. The questions studied here are chosen based on an initial overview of the data, which indicated the potential existence of differences relating to these questions.

Table 8.12. Importance of Annual Report by Country			
	Analysts in the	Analysts in the	Analysts in
	US	UK	Germany
Essential	1	1	2
Useful with other information	4	3	2
Used only as reference	0	2	0

Table 8.12 shows that five U.S analysts responded to the question of how important the annual report is in company analysis. Of these five, one saw the annual report as essential, four saw it as useful when supplemented by other information, while none used it only as a reference. Further, two out of six UK analysts used the annual report only as a reference source, while two out of four German analysts saw the annual report as essential in the analysis. Even though Table 8.12 does not supply a clear pattern on differences by country, there is some tendency for the annual report to be more important in Germany, and less important in the UK.

Table 8.13. Use of Parts of Annual Reports by Country			
Item	Analysts in the US	Analysts in the UK	Analysts in
			Germany
Income statement	5	2	4
Balance sheet	2	1	4

Table 8.14. How Financial Statements Are Used, By Country			
Item	Analysts in the US	Analysts in the UK	Analysts in Germany

Income statement used as basis	5	4	4
Balance sheet used as basis	1	3	1

Tables 8.13 and 8.14 indicate which parts of the annual reports are used by analysts from different countries. As shown in Table 8.13, all German analysts state that they use both the income statement and the balance sheet, while the income statement is more dominant for US analysts. Many of the UK analysts did not specifically state that they use any specific part of the annual report, but among those that did, the income statement is somewhat more popular. Table 8.14 partly contradicts results in Table 8.13, since here analysts in the US are similar to those in Germany, while for UK analysts the balance sheet is quite well-used. The difference between the two tables is that Table 8.13 shows whether the analyst specifically mentioned each of the financial statements, while Table 8.14 shows to what extent reported statements are used as a direct basis for analysts' forecasting activity.

Since results for Tables 8.13 and 8.14 are contradictory, it appears unlikely that results for these questions are driven by the country selection made in the sample used here. Based on Table 8.12, however, it is possible that findings regarding the importance of the annual report are affected by country choices. Judging from the population of analysts identified in Tables 4.3 and 4.4, German analysts are over-represented in the sample used here. Thus, it is possible that the importance of the annual report is slightly overstated in this study. On the other hand, the population is identified using US publications, thus possibly understating the number of German analysts in the population. In addition, if German analysts are seen as representative for Continental European analysts, the numbers included in the sample used here seem reasonable.

To conclude, there are no immediately apparent country effects driving results in this Section 8.1. The issue of country differences is discussed in more depth in Chapter Nine.

# 8.2. The Company Analysis Process

This section includes an analysis of the primary receiver interviews, where categories are being generated. Analysts' reports (see Section 5.2) are also used in the analysis. In Section 3.3.2, a two-step analysis method is presented, where structures are created from a cursory analysis of the material. These structures are then used for an in-depth analysis. Here, the initial structures are presented in Section 8.2.1, and the analysis of the empirical material is shown in Section 8.2.2. In Section 8.2.3, results and implications for the research issues are discussed.

An attempt is made in Section 8.2 at taking seriously Moore and Carling's (1982, pp. 163-164) claim that subjective research should be *systematic*, even though it is not *formal*. Thus, the aim is to achieve a systematic analysis of the interviews and reports in this section.

#### 8.2.1. Initial Structures

The use of a two-step or circular analysis approach is inspired by grounded theory, hermeneutics, and discourse analysis (Section 3.3.2). There are three dimensions that can be described by the hermeneutic circle. These are the relation between the whole and the parts, the empirical material and the researcher's interpretation, and the manifest and the latent. In all these cases, initial structures must be created, for example by using the empirical material. For discourse analysis, Potter and Wetherell (1987, p. 168) state that analysis starts with a search for patterns (structures).

In this section, initial structures are created in three different ways. These are the development of a model for how company analysis is done, influences from analysts' contextual environment, and the existence of narratives in interviews or reports.

In the model development, the first step is to figure out *how* analysts do their company analysis, and how they use accounting <sup>89</sup>. With this as a basis, the next step is to investigate whether the usage indicates any problems with international accounting diversity. A model is presented here (Figure 8.1), which covers what analysts appear to be doing. This model is used as a tentative structure in the interview analysis. The model shows what external data is used by analysts (annual reports, and other data). The process is meant to indicate how analysts - using a Moore and Carling (1982, p. 187) framework - turn data into information. Moore and Carling do not tell us *how* meaning is created, only that the user is somehow involved. Thus, it is necessary to create a structure here, which indicates how analysts use annual reports in order to create meaning. The outcome of the process is the visible reports that are issued by analysts and they are studied in the report study. It should be noted

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<sup>&</sup>lt;sup>89</sup> Important properties of the model of the company analysis process developed here are briefly mentioned in Section 1.3. In this Section 8.2, the model development is more thoroughly discussed.

that Strauss and Corbin (1990, pp. 143-144) suggest that processes be studied, which is what is done with the model developed here.

Such a model can be developed based on either empirical material or prior research. Here, even though prior research does provide some inspiration, the model is mostly based on the empirical material at hand. This is in line with the grounded theory approach (see Section 3.3.2). The focus on the empirical material is also related to the second dimension in the hermeneutic circle, as stated above. There should be an interrelationship between the empirical material and the researchers' interpretation with a relatively limited (but not nonexistent) role for prior research.

The other two dimensions in the hermeneutic circle are also covered by the model. The model is seen as the whole, which is used in Section 8.2.2 to study the parts. The third dimension is perhaps the most complex one. What is manifest is what interviewees actually say, as well as the text found in the reports. In the actual model, external data and outcome tend to be manifest, whereas process tends to be latent<sup>90</sup>. In Moore and Carling's (1982, pp. 32-34) terminology, the former are objective and the latter is subjective. One way to approach the subjective parts of the model is to treat them as a black box, i.e. only focus on the objective data that goes in, and the objective output that comes out of the process. The black box approach is not used in this section, however.

It should be pointed out that the model applies to fundamental analysis of companies, rather than to technical or quantitative analysis (see Section 4.2). This is not a problem, since all interviewees do perform fundamental analysis.

The external data part of the model is relatively easily modeled. Data is by necessity either from or not from an annual report. The outcome part is easy to compare to actual reports issued by analysts. It is a depiction of such reports, albeit a simplified one.

The process part of the model, however, is the one that is most interesting, and it is also the one that is most difficult to study based on the empirical material provided by interviews and report studies. The fact that evaluation of company growth prospects and investment risk is central in company valuation is supported both by the empirical material, and by financial theory

<sup>&</sup>lt;sup>90</sup> To some extent the analysis process is talked about directly by interviewees, and in that sense the process is also partly manifest in the interviews. The modeling of the process is not complete when only the manifest statements are used, however, so attempts are also made at modeling the latent aspects.

(see Section 2.2). The concept of accounting risk, on the other hand, is not as commonly used. For the current study, however, it is a central concept, and it is discussed more below.

The dotted line in Figure 8.1, marked with 1's, indicates that analysts may decide not to follow a company at this point in time. Analysts' reasons for this may be that the company has a poor growth prospect, that the information provided by the company in the annual report is considered to be of poor quality, or a lack of trust in company management. This is supported by the empirical material, and by prior research (e.g. Lang and Lundholm, 1993).

One can see in analysts' reports that multi-year forecasts are produced, and that historic (last year's) financial statements are used as a basis. It appears that future financial statements are created by a forecast of *changes* in prior year's statements, rather than as a forecast of absolute numbers. This is of central importance, since it provides a potential usefulness for accounting in company valuation, even though accounting only includes historic information. If changes are forecast, the historical basis used for the forecast becomes essential. This issue is further discussed and developed later in this section, and in Chapter Ten.

The model indicates that analysts use risk- and return-based valuation models to estimate future stock prices. Some analysts' reports do show that such estimation is performed. In other reports, where the valuation model used is not so clear, the assumption is made that valuation is based on risk and return. This assumption is related to the discussion above on company valuation being based on expected future growth prospects (return) and the estimated risk in these prospects.

Analysts issue recommendations, which can be either buy, sell, or hold (Schipper, 1991, p. 113). The claim that the recommendation is based on a comparison of a target stock price with the current price does not appear to be outlandish. It is further supported by Schipper (ibid., p. 113).

It was noted above that two central concepts in how analysts use accounting information are the concepts of risk and of using financial statements as a *basis* for forecasts. The concept of accounting risk is introduced in the model<sup>91</sup>. This is not a new concept, but is discussed, for example, by Bernstein (1993, pp. 68-69).

<sup>&</sup>lt;sup>91</sup> Previously mentioned in Section 1.3.

Accounting risk can be divided into perceived and actual. Actual (which is what is discussed by Bernstein) is risk caused by lack of correspondence between accounting numbers and some measure that is exogenous to the accounting system. Nobes and Parker (1995, pp. 44-45) use the term fairness to describe the correspondence of accounting with such a measure<sup>92</sup>.

Perceived risk is caused by lack of trust, in either an accounting system, or in a company (the distinction is discussed by Luhmann (1979) who talks about personal trust and system trust). System trust is affected by knowledge of a particular system<sup>93</sup> (Moore and Carling, 1982, pp. 172-173). For example, several interviewees express that they are more comfortable with accounting numbers based on IAS's or US GAAP (systems they know) than with Swedish numbers (a system they know less about, cf. Table 8.5).

In this section, accounting risk is studied through the eyes of interviewees. Then, one can ask whether it is relevant to make the division between actual and perceived accounting risk, since analysts are probably unable to distinguish between the two types of accounting risk during the company analysis process. When faced with an annual report, analysts do not know whether the accounting risk they see is actual or perceived. The distinction is still of interest in research, however, since ex post it is possible to distinguish between the two types of accounting risk.

The other central concept derived from the model in Figure 8.1 is that financial statements are used as a *basis* for forecasting, rather than for forecasting itself (Schipper, 1991, p. 108). As a background, one might wonder how accounting (a historical description) can be used to forecast the future (which requires estimates of future events). This is described as predictive value by FASB (1993, pp. 27-28). The apparent contradiction between needing future-oriented information, and having a role for accounting in company analysis, can be solved by focusing on accounting as a basis. Thus, historic financial statements are taken as a fixed point, against which to forecast future changes. In addition, published financial statements can be compared to

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Defining this measure is not a trivial undertaking. In Section 1.3 it was defined as 'true value creation', which would be akin to 'economic reality', a concept which is implied by Bernstein, and Nobes and Parker. As noted in Section 1.3, such concepts infer the existence of an objectively given measure. This is difficult to reconcile with the ontological stance taken in Section 3.1.2, i.e. that we are concerned with a socially constructed reality. One solution to this dilemma is given by the return model in the statistical study, analyzed in Section 7.1. This model provides a concrete operationalization of actual accounting risk, without a need to resolve the more theoretical and conceptual concerns.

<sup>&</sup>lt;sup>93</sup> Perceived accounting risk may also be caused by a lack of disclosure in annual reports, which impedes the ability of accounting receivers to evaluate the reliability of the information.

previously made forecasts, in order to evaluate their accuracy. This is described as feedback by FASB (ibid.) in its Statement of Financial Accounting Concepts No. 2, as part of the criterion of relevance of accounting.

A suggestion that financial statements are used as a basis for forecasts came, for example, from the following quote:

Accounting numbers are important. They are used in spreadsheets as a basis for forecasts (R10).

Consequently, there is a potential role for accounting. Linking to the concept of accounting risk, we can see that a high accounting risk is negative. The existence of accounting risk makes the basis for forecast less reliable, and thus renders the actual forecast less reliable as well. Similarly, the function of checking previously made forecasts is impeded by accounting risk. Issues related to the concept and development of accounting risk are further discussed in Chapter Ten.

The line of reasoning provided here can be directly related to the research issues in Section 1.1. The first research issue, regarding how accounting is used on stock markets, is addressed by the model in Figure 8.1. Concerning the second research issue, on the impact of international accounting diversity, the modeling done here suggests two implications. First, actual or perceived accounting risk may vary between national accounting systems, and may therefore impact company analysis. Accounting risk, in turn, could be related to accounting principles, disclosure levels, and audit procedures (cf. Section 4.3). All these three are studied separately as different levels of potential accounting diversity in Section 8.2.2. Second, comparability between forecasts created on the basis of different accounting systems could be impaired. However, as discussed in Section 8.2.3, accounting risk and comparability can be seen as two sides of the same underlying issue.

The way concepts are defined here, accounting risk involves subjective variables, whereas comparability does not. The subjective variables are covered by perceived accounting risk. As noted above, for example, perceived accounting risk may be caused by interviewees' lack of knowledge of other countries.

Some of the concepts defined here are objective. However, they are only objective on a conceptual level. When they are analyzed in Section 8.2, the analysis is subjective, in the sense that interviews are used. Thus, the con-

cepts are studied as they are understood, explicitly or implicitly, by interviewees. This can be compared to Chapter Seven, where actual accounting risk is studied in a more objective manner. In Moore and Carling's (1982) framework (Section 1.3), this Section 8.2 is focused on meaning, whereas Chapter Seven studies data.

The use of financial statements as a basis for forecasts is also related to a slightly different idea, namely that financial statements are used primarily as a tool to reduce risk, rather than to forecast return. Thus, financial statements do not provide information about the future as an aid in making forecasts, but instead has the role of reducing uncertainty about the present<sup>94</sup>. If the financial statements indicate problems existing at present, that may be a warning to analysts. This idea came directly from the material, and an interview quote suggesting this is the following:

The financial statements can give a warning signal. If companies try to boost earnings, capitalize interest or have substantial changes in accounting principles from year to year, that is a warning signal (R3).

The structures discussed so far<sup>95</sup> are based on how accounting is used by analysts in the company analysis process. Two other possible structures are also analyzed in Section 8.2.2. As pointed out in Section 4.2, analysts are potentially influenced by their contextual environment, and the related incentive structure. The view that the behavior of interviewees can be described by how they react to incentives has been suggested in hermeneutics (Alvesson and Sköldberg, p. 129). In accounting research, it has been proposed by Watts and Zimmerman (1978). Some structures are directly obtainable from Section 4.2. For sell-side analysts, they include that analysts are expected to be reluctant to issue 'negative' reports, that they want to change their recommendations often, and that they want to make forecasts that enable investors to beat the stock market index.

One can see additional structures based on analysts' incentives. Analysts are professionals who are expected to take pride in what they do. Thus, it is possible that analysts are unwilling to make their 'trade secrets' explicit, i.e. they are unwilling to describe how they come up with recommendations. It could

<sup>&</sup>lt;sup>94</sup>As discussed further in Chapter Ten, we do not have perfect certainty about the present states of nature, just as we do not have certainty about future states of nature. Therefore, accounting potentially fills an important function, in that it reduces uncertainty about the present (and the near past).

As a reminder, the structures are the model presented in Figure 8.1, the concept of accounting risk, and the usage of financial statements as a basis for forecasts.

also be that they are unable to make this explicit, but that they are good at hiding the fact that they are unable to do it.

Analysts also have reasons to appear convincing, and to give a strong argument for their recommendations. This is related to questions that should be asked in text analysis, as suggested in Silverman (1993, pp. 60-61). Such questions include who wrote the documents, for whom they are written, what is assumed by the writer about the reader, what is omitted, etc. Thus, it is possible that accounting numbers are included in the reports and referred to by analysts, because that is what is expected of them. Readers expect analysts to base their arguments on accounting numbers, but in reality analysts might not use accounting when forecasts are made.

Another way of analyzing the empirical material is to search for stories or narratives provided by interviewees or in reports, as discussed in Section 3.3.2. It should be noted that the focus in the analysis is not on the stories themselves. Rather, stories are used to get to underlying social phenomena or structures, as suggested by Alvesson and Sköldberg (1994, pp. 286-287). Analyzing stories can be a way of understanding how interviewees construct and make sense of the world (Moore and Carling, 1988, p. 169). Initial structures relating to narratives are, in general, not apparent in the material. The one story that is regarded as an initial structure, is the story that German (Swiss/French/Italian) accounting is difficult to understand or provides limited disclosure. This story is tested in Section 8.2.2.

# 8.2.2. Analysis of the Empirical Material

This section involves the second step of the analysis (inspired by the hermeneutic circle, cf. Alvesson and Sköldberg, 1994, p. 116), in the sense that the whole (as developed in Section 8.2.1) is used to interpret and analyze the parts. At the same time, the parts studied in this Section 8.2.2 are used to test the usefulness of the whole. In Potter and Wetherell's (1987, pp. 168-169) framework, this section involves explaining the structures (or patterns) by using the empirical material. Such an explanation involves looking for both similarities and variation between interviewees.

More concretely, the initial structures developed in Section 8.2.1 are used to construct a coding structure. This is used to analyze interviews and reports in more depth. Based on the model of the company analysis process several codes are developed. First, a general code on information processing is used. Second, codes relating the specific processing items in the model are used. As noted in Section 8.2.1, answers to the research issues will be found by

identifying adjustments relating to international accounting diversity. Such adjustments can be both explicit (quantified) and implicit (judgmental). There are codes for finding such adjustments, and they are related to each of the potential aspects of accounting diversity, which are accounting principles, accounting risk, disclosure, and audit. There is also a code for other types of accounting diversity.

For investigating the impact of contextual factors, two codes are used. These are impact of national environment, and impact of incentive structures. The former of these two is closely related to the analysis in Chapter Nine. However, it is still included here, since there are potential effects related to national environment that are relevant for the analysis in this Chapter Eight. For identifying stories, a single code was used. The presentation below largely follows the coding structure.

### **Information Processing**

Several indications are given to support the structures on how analysts process accounting information, that are presented in Section 8.2.1. These include how financial statements are used, implicit conceptions of accounting and investment risk, and the role of trust.

Several analysts point out that most of the forecasting effort is made in fore-casting revenue. Then, costs are added as a percentage of revenue. Here, it is important to point out that the interviewees use non-annual report data to make the forecasts. Such data includes industry data, company strategy, and management quality. Direct contact with management, through road shows and an active investor relations department, is noted as important by several respondents. It is mentioned that historic financial statements are used as a basis for forecasts. In addition, when new financial statements arrive, they are used to confirm or discard past forecasts. Thus, the model in Figure 8.1 is supported by the interview material.

It is also supported by the report study. An evaluation of company growth prospects is shown in all reports. The narrative in the reports is mostly focused on estimating future growth, which in turn is used for an income statement forecast. In the creation of forecasts, the level of detail provided by segments is striking. Sales forecasts are built by product and geographic segment, and then combined to consolidated sales figures. Costs are estimated as percentages of sales, with justified changes, and this results in earnings forecasts. The information apparently used in creating sales forecasts by segment is general market conditions for the product, as well as the competitive posi-

tion of the different suppliers. Exactly where this information comes from is difficult to determine with only the reports as a basis.

Thus, the reports have a clear focus on the concept of investment return, and the estimation of future returns. There are also indications of the concept of investment risk in many reports. The indications take the form of discussing possible reasons why forecast growth may differ from estimates made. There are also discussions about the cyclical nature of different businesses, which is related to the way risk is defined in CAPM<sup>96</sup>. One report contains an explicit rating of the level of investment risk.

The concepts of actual and perceived accounting risk were mentioned in Section 8.2.1, and these concepts are implicitly covered in the empirical material. Several respondents talk about earnings momentum, and temporary earnings effects. Temporary earnings effects that are caused by the accounting system rather than by 'real economic effects', are related to accounting risk. Temporary earnings caused by 'economic effects', on the other hand, constitute investment risk rather than accounting risk. A stronger indication that accounting risk is a relevant concept is given by an analyst, who stated that adjustments are made for hidden earnings for certain companies. This statement indicates a belief in the existence of 'true earnings', and that accounting earnings can differ from 'true earnings', which is an idea behind the concept of actual accounting risk (even though 'true earnings' are not objectively as-Several reports include a discussion of the effect of nonrecurring (temporary) items on earnings and EPS. EPS adjusted for temporary items is used in the valuation models in some reports.

Some analysts also see a potential problem with low trust in management, which leads to a potentially high variability in accounting numbers. Thus, accounting numbers are seen as being less in agreement with economic reality than if there is a high level of trust in management. This is also a type of actual accounting risk, even though it is based on analysts' perception of management. What may make this type of actual accounting risk especially worrisome for analysts, is that it is not only expected to lead to increased variability in accounting profit, but also to an upward bias in current year profits. This may lead to future surprises or shocks from the company.

It was pointed out by one analyst that trust in companies is related to which country the company is from. US and UK companies tend to have more of a

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<sup>&</sup>lt;sup>96</sup> The beta-value, which is the measure of risk in CAPM (Capital Asset Pricing Model), is defined as the relative price movements of a company's stock in relation to the market index. The magnitude of this measure is often driven by how cyclical a company's activities are.

shareholder focus than companies from continental Europe. Therefore, when analyzing companies from the latter geographic area, this respondent is more careful in checking the intentions of management. Such intentions include whether management is willing or not to give something back to shareholders. Related to this is a statement by another analyst that Swedish companies have good accounting because they are driven to a high disclosure level by their need for international capital (cf. below). Thus, by necessity, they become shareholder friendly. These statements support the concept of (accounting) system level trust, and thereby the idea of perceived accounting risk.

The use of a general financial theory framework of risk and return is suggested by several interviewees. One explicitly mentions that he uses present value and discounting calculations for estimating the value of companies. Indirectly the same line of reasoning is implied by analysts who use P/E ratios, since this is just a reverse return figure. The framework is also latent in statements that investments in companies must be compared to what happens to other investment alternatives. In the majority of reports, the P/Ebased valuation models are used. Then, current stock price is compared to forecast future EPS in order to obtain 'future' P/E-ratios. compared to historic and current P/E-ratios for the analyzed and for similar companies. Sometimes, a similar technique is used with P/BV-ratios or P/CF-ratios<sup>97</sup>. As noted, risk and return can be implied in these valuation models. The level of the ratios is dependent on the risk class of the company analyzed, which is obtained by comparing it to other companies in the same In some cases such a comparison is explicit, for example by comparing the E/P-ratio to returns on long-term bonds.

Two more unique valuation models are exhibited in the report sample. In one of them, the analyzed company (Volvo) is valued as an investment company. The various business entities within the company are valued separately, based on actual or estimated market values. In the other, a present value of future earnings and cash flows are calculated, based on perpetual growth assumptions. Both these models are built upon the concepts of risk and return.

The level of system trust is generally high among analysts. They do exhibit a substantial level of trust in the accounting system. Often they use accounting numbers, without much consideration of the likelihood that the numbers are misstated. This is reflected both in the interviews and in the report study. One can conclude that analysts appear to believe in the accounting system on

<sup>97</sup> P/BV = Price/Book Value, and P/CF = Price/Cash Flow

a macro level<sup>98</sup>. A further indication of this is provided by analysts' approach to audit reports, see below.

### Adjustments related to accounting principles (valuation) diversity

Explicit and quantified adjustments are generally not made for Swedish accounting by non-Swedish analysts. The reason given is that Swedish financial statements are so close to US GAAP and IAS that no adjustment is necessary. Several interviewees mention that adjustments are made for German and Swiss companies. An interesting point here is that even German analysts adjust reported German accounting figures, by basing their analysis on DVFA-adjusted<sup>99</sup> numbers. The reason given is that the DVFA-adjustment removes effects of discretionary reserve allocations, thus removing temporary effects that are unrelated to economic reality. The desire to focus on permanent, economic earnings is consistent with the concept of actual accounting risk.

Many analysts point out that diversity in accounting principles is implicitly considered in the analysis, but that it is not possible to make quantitative adjustments. Thus, when companies are compared across countries, no such adjustments are made. An indication that analysts actually do have an idea of the effects of accounting differences is given by an analyst of Astra. He points out that Astra is more conservative than US companies in its calculation of tax expense. Astra's profit would be higher if it used the same method as US companies. As predicted, he does not give a quantification of the effect.

Some accounting adjustments are reflected in the report study, however, and the adjustments (or lack of them) do indicate that accounting diversity creates comparability problems for analysts. In a few reports, the tax number used is taxes paid rather than tax expense, for both historic, current, and forecast income statements. This suggests that the analysts are uncomfortable with the Swedish accounting for taxes, but also that analysts are able to adjust for the problem. There are also several reports where historic income statements and

<sup>&</sup>lt;sup>98</sup> One could argue that it is rational for investors and analysts to have a high level of trust in the accounting system. First, the accounting system does have checks against poor accounting, such as legal requirements, and auditors. Second, companies may have incentives to keep a certain quality level in their accounting, since they may otherwise encounter a decline in interest from investors.

<sup>&</sup>lt;sup>99</sup> DVFA (Deutsche Vereinigung für FinanzAnalyse) gives out recommendations on how to adjust reported German accounting numbers in order to make them more useful for financial analysis. The adjustments must be made by companies themselves, but most German listed companies do provide DVFA-adjusted income numbers.

balance sheets are unadjusted for the effects of untaxed reserves, and allocations to such reserves. Unadjusted numbers are compared to financial statements for later years, where companies themselves have removed untaxed reserves. This clearly indicates a problem in time series analysis that is caused by international accounting diversity, and it does not appear to have been noted by some of the analysts. The problem is further substantiated by the fact that adjustments are sometimes random within reports. In one report, for example, financial statements are adjusted for tax effects in some cases, but not in others, with no written explanation for when adjustments are made. These findings further strengthen the argument for removing untaxed reserves in Swedish accounting, in order to facilitate for non-Swedish users. In a different case, the entire untaxed reserve is taken to equity, thus overstating equity in early years. There is no explanation in the narrative to support this adjustment.

Apart from taxes, adjustments are sometimes made or discussed for extraordinary items and foreign currency translation. Another exception to the general rule of no quantitative adjustments is given in the interviews by a US analysts, who states that a company will not be followed unless restatement to US GAAP is possible. The Swedish company followed does give US GAAP information in its annual report, and for quarterly statements the analyst does attempt to adjust.

Here, it is possible to use categorization of analysts (see Section 8.2.3 for a discussion of how the categorization used here differs from that used in Chapter Nine). A clear distinction can be seen between three of the US analysts, for example. One, as noted above, wants translation to US GAAP. This analyst only follows one non-US company. A second analyst, who specializes in the analysis of non-US companies, is not concerned about obtaining US GAAP information. Rather, he focuses on comparability per se. He does not see any comparability problems for Swedish companies, but said he has to make adjustments for German and Swiss companies. This second analyst appears to have a more advanced view of international accounting diversity, in the sense that the utility of financial statements is more important than receiving them according to the home country rules.

Both analysts covered so far see the financial statements as important and useful in the analysis. This is somewhat different with the third analyst. He states that a unique analysis model is used for each company, and that the exact accounting principles used by a company are not that important. Underlying this reasoning would be a more qualitative approach to comparative

investment analysis. Consequently, it may be assumed that an implicit consideration of accounting diversity is made.

The categories can be related to the research issue. The first analyst is likely to be affected by accounting diversity. He can only analyze companies where it is possible to restate to US GAAP. Since this is difficult to do if the US GAAP information is not provided by the company itself, the analyst is limited in his choice of non-US companies. The second analyst restates where necessary, but not necessarily to US GAAP. The third analyst is more likely not to be affected by accounting diversity. Choi and Levich (1990) suggest two methods that can be used by investors in coping with accounting diversity. These are multiple principles capability 100 and restatement. Here, the first analyst uses restatement, while the second has achieved some form of multiple principles capability. The third analyst copes by focusing more on non-financial statement data.

An interesting point to note is that several UK analysts mention that adjustments are made for goodwill in international comparisons of companies. This seems to be related to the fact that they are from a country which has been at the center of an international goodwill debate, about the role of goodwill in mergers and acquisitions (Lee and Choi, 1992). Unlike companies from most other countries, UK companies could write down goodwill against reserves. This has been extensively discussed, however, so the issue may have been at the top of the mind of many UK analysts at the time.

### Adjustments related to accounting risk

Some of the US and UK analysts mentioned that they are more comfortable with the Swedish numbers when a Swedish company states that it follows IAS's. This could be an indication that analysts see Swedish accounting numbers as riskier than IAS numbers. One also mentioned that it is an advantage if Swedish companies present US GAAP information, but that it is even more crucial for companies from countries smaller than Sweden. This could indicate that the smaller the country, the higher the perceived accounting risk. It could be caused by analysts being less knowledgeable about accounting systems in smaller countries.

The report study shows that US GAAP information is used or referred to in several reports. In one report, the actual differences between Swedish accounting and US GAAP, and how it affects the company analyzed, are discussed. Another report provides full income statements according to both

By multiple principles capability is meant that the analyst is able to interpret financial statements prepared according to accounting principles from several countries.

Swedish accounting and US GAAP. The stated reason for including Swedish-based figures is that trading on the primary market for the company's shares (London) is based on Swedish accounting. In several reports, US GAAP EPS is shown, however. Thus, there are indications that some analysts perceive that US GAAP information is useful, or at least that they expect readers of the reports to perceive such usefulness. The usefulness may, in turn, be related to a perception of lower accounting risk with US GAAP than with Swedish accounting numbers.

Accounting risk is also demonstrated in the reports through comments on the use of specific accounting principles. In one report it is noted that if goodwill was taken directly to reserves, owners' equity would become negative for the company analyzed. This shows an awareness of the potential for variability in accounting numbers, that can be caused by accounting principle choices, which is what gives rise to accounting risk. In another, financial statement effects of expensing certain capitalized set-up costs are discussed. In a third report pension liabilities are shown separately from all other debt, implying that this debt has a higher actual accounting risk than other debt. Here, actual accounting risk is defined as variability around the 'economically correct' figure.

Some German analysts mentioned that French and Italian accounting is entirely unreliable (which coincides with the UK and US view of German and Swiss accounting). Another German analyst stated that the conservative nature of German accounting gives more comfort than what is provided by UK or US accounting. Consequently, it appears to be true that people perceive accounting in other countries to have higher risk than accounting in the home country.

A further indication of the existence of perceived accounting risk is provided by one analyst, who states that accounting can be difficult, and therefore local brokers are often used. In other words, it is difficult to rely on accounting produced in other countries.

A US analyst notes that there is accounting risk in all accounting environments, talking about the latitude allowed under US GAAP. Thus, accounting risk can also be perceived as applying to interviewees' home country accounting.

Adjustments related to disclosure diversity

There is general agreement among interviewees that Swedish annual reports have adequate disclosure levels. Disclosure is not seen as a problem. An explanation for this given by some analysts is that Swedish companies need international capital, and this drives Swedish disclosure levels. On a general level, it is mentioned that US and UK companies have high disclosure levels, and that the opposite is true for German and Italian companies.

One analyst did mention a problem with disclosure for Swedish companies. There was a lack of information in what is included in financial income and expense, so that these items tend to fluctuate greatly over time. Thus, they are difficult to forecast. This can be interpreted as leading to higher accounting risk.

In one of the analysts' report, substantial amounts of data are obtained from Form 20-F rather than from the annual report. The data includes detail on geographic segments, and on exports from Sweden. This is an indication that the analyst does appreciate the higher disclosure requirements under US GAAP than what is required in Sweden, at least as it applies to segment data.

### Adjustments related to audit diversity

Audit diversity does not seem to be a problem, since almost nobody looks at the audit report. The only analyst that mentioned the audit report, said that he did not look at it.

All Swedish companies included in this study are audited by large, international audit firms ('The Big Six' <sup>101</sup>). This can be seen by analysts as a quality assurance. Thus, the internationalization of the accounting firms have helped overcoming audit diversity as an issue in international investing and analysis. Rather, the issues arise and are covered internally within the accounting firms. Seen differently, it is another indication of a high level of system trust. One can note that analysts appear to assume that the audit is done by a reputable accounting firm, even though they do not even check for it <sup>102</sup>.

## Adjustments related to other areas

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<sup>&</sup>lt;sup>101</sup> Following mergers announced at the end of 1997, 'The Big Six' may turn into 'The Big Four'

<sup>&</sup>lt;sup>102</sup> Of course, one cannot exclude the possibility that analysts receive information about the audit from other sources than the annual report.

Apart from accounting principles, accounting risk, disclosure, and audit diversity, some other areas were mentioned by interviewees, and they are covered here.

First, there is the issue of timing of information. A German analyst mentioned that German annual reports tend to come too late. A US analyst stated that US GAAP information provided by Swedish companies is not very useful, since it is only given on an annual basis. Instead, the focus was on quarterly financial statements. If information comes late, it is likely to lead to a lower level of usefulness. This is caused by lower predictive and feedback values due to the time lag, since the basis for forecasts is already old, i.e. it does not cover the present time.

A few of the German analysts said that they focus more on non-financial data in the annual reports of German companies than in those of non-German companies. Maybe this is an indication of differences in knowledge about companies from different countries, making German text parts more relevant. This can be related to the concept of perceived accounting risk, in that there is a higher reliance on material produced in analysts' home countries compared to that from other countries.

One analyst mentioned that accounting terms differ between countries, and that there are financial statement classification differences. None of these items were really noted as a problem, however.

A problem reflected in Swedish financial statements is that the Swedish tax system leads to fluctuations in tax rates for Swedish companies, which makes the tax expense item difficult to forecast. It is somewhat unclear whether this was seen as caused by the tax system, or by Swedish companies' accounting treatment of deferred taxes. Although it undeniably is a problem for analysts, it cannot be seen as an accounting problem in the former case. If the latter is true, it should be part of adjustments related to accounting principles diversity, and it is an item that increases accounting risk in the Swedish accounting system.

Diversity of balance sheet formats is adjusted for in two of the reports. The balance sheet is presented according to a general European format (i.e. in order of increasing liquidity) instead of a Swedish format (which was, at the time this study was undertaken, in order of decreasing liquidity).

#### National environment

#### Chapter Eight

This discussion is related to Chapter Nine, which categorizes analysts based on home country. A few points on the effects of national environment will be given here.

One analyst said that restatement to US GAAP tends to be more important for US investors than for European ones. This is somewhat supported by German analysts' statements about how they use US GAAP. There are also statements in the other direction, however, such as US analysts not putting much importance on US GAAP, and UK analysts stating that US GAAP is important. There is, however, a tendency that the US/UK group of analysts see US GAAP as more important than German analysts do. Cf. Chapter Nine, where the same division of analysts into two geographic groups becomes apparent.

There is also a tendency that interviewees mention items that are important in their home country accounting environment. The mentioning of goodwill by UK analysts was noted previously. German analysts talk more about the balance sheet than analysts from other countries. This is in the Schmalenbach (1926) tradition, see further Section 4.4. They also mention the existence of discretionary reserves, and that DVFA adjustments are important in company analysis. It should be noted that the main purpose of DVFA adjustments is to remove effects of discretionary choices by management. German respondents also mention the importance of the free float of shares, which is never mentioned by US or UK respondents. This is also reflected in reports by German analysts.

#### **Stories**

In this section, common stories are covered. The fact that they are called stories does not mean that they cannot be related to some underlying social structures. Rather, methodologically, these findings are the result of looking for stories in the interview and report material. It should also be noted that the focus is on stories related to the research issue. Many more stories could potentially be found in the material.

The most pervasive story is about the high-level differences between accounting systems in the world. The US and UK are seen as high disclosure countries, where companies in general have a shareholder focus. German (and Swiss, Italian, and French) accounting, on the other hand, is seen as poor for company analysis. It is interesting to note that German analysts agree with this to some extent. They say, for example, that German accounting is not very useful unless it is DVFA adjusted. German accounting is seen as

allowing too many discretionary choices, annual reports come too late, and there is little interim reporting (semi-annual reports are issued, rather than quarterly ones). However, German analysts also have a contradictory story, which is that it is difficult to state which accounting framework is most useful, so they focus on the existence of differences, rather than on relative quality. This story could be compared with Harris et al (1994), who did not find any significant differences in value relevance between US and (DVFA-adjusted) German accounting numbers. For this dissertation it is also important to note that in the case of Swedish accounting there are no major problems noted.

A second story given by some respondents is that in general investors and analysts are unsophisticated in evaluating effects of international accounting diversity. One respondent even stated that most analysts do not know much about accounting in general. Implicit in this story is that the respondent telling it knows more than those that are referred to.

Stories told by analysts seem to be affected by what is currently discussed in their respective accounting environment (cf. National environment above). Many UK analysts talk about goodwill (cf. adjustments related to accounting principles). They also tend to talk about trust in management, which can be related to the UK debate about creative accounting. As noted above, German analysts emphasize the free float of shares, which is really only discussed in Germany.

#### Incentive structures

Incentives can affect interviewees in two different ways. First, there could be direct effects from incentives that are faced by analysts or their firms. Second, in their company analysis, they could have to consider incentives facing company management.

Some effects of the first type can be seen, but it is difficult to discern any effects that are relevant for the research issue. Rather, the findings in this part can be useful to evaluate the validity of results in other parts of the interview study. A cautious approach to sources used in research, including awareness of the self-interests of interviewees, has been suggested in, for example, hermeneutics (Alvesson and Sköldberg, 1994, p. 129).

Analysts have to provide some value-added in the investment process, or at least be perceived as providing some value-added. One part of this is that analysts should be seen as more knowledgeable about company analysis, or

about specific companies, than most investors. For example, one of the US analysts works for a firm that specializes in the analysis of international (i.e. non-US) stocks. With that specialization, would it be possible for him to say that he has problems with non-US financial statements? Whether or not such considerations by interviewees affect results is difficult to say without further research.

The buy-side analyst included in the study can be expected to face less market pressure, as well as less pressure from companies analyzed. There is no need for buy-side analysts to generate brokerage fees by inducing trade, and the companies analyzed do not have access to the analysis reports. Thus, there can assumedly be a higher focus on the 'quality' of the analysis. What is apparent in the interview is that this analyst has a more long-term focus than most other analysts, which in turn leads to a higher focus on management quality and a lower focus on short-term financial measures. Thus, this analyst uses financial statements to a lesser degree than many other analysts, and should for this reason be less affected by international accounting diversity. It is not clear whether this view is representative for the general population of buy-side financial analysts.

Two UK analysts are specialized on Scandinavian companies. One could assume that an increased interest on the part of investors in Scandinavian companies would be beneficial for these analysts. Thus, they could be expected to give an overly positive picture of investments in these companies. There is no real sign of this, however. Both analysts stated that Swedish annual reports have a relatively high standard, but in this respect they do not differ from other analysts.

One interviewee stated that many investors use a top-down approach <sup>103</sup> to international investing, thereby avoiding the need to directly compare companies across countries. This also applies to how some analysis firms are organized. Further, this interviewee mentioned that the top-down approach is losing ground in favor of direct comparison. Whether this statement about the change is true is not investigated in this study. The statement does, however, raise an interesting issue of how incentives affect financial firms. The incentive behind such a reorganization is assumedly that direct comparison is a more effective investing and analysis approach, i.e. higher return and/or lower risk can be achieved by using it. This is very important for the research issue. Problems with accounting diversity can be avoided by

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<sup>&</sup>lt;sup>103</sup> In a top-down investment approach, the amount to be invested in each country is determined based on macro-economic variables. Thereafter, investment choices are made for the pre-allocated amount inside each country. In this way, investors do not have to compare companies from different countries directly with each other, and the comparability problem in international accounting diversity is avoided.

using a top-down approach, but *not without a cost*. The alternative approach with direct comparison avoids one cost, but instead raises several issues relating to accounting diversity. Thus, it may be that all analysts and investors involved in international investing or analysis *are* affected by international accounting diversity, but in different ways.

As noted previously, companies analyzed may also be affected by various incentives. Some analysts mention possible effects of such incentives, and how it affects their analysis. One analyst mentions that a problem with the Swedish company he follows is that management does not own enough stock, and therefore may not act in the interests of shareholders. It is seen as important that management is directly affected by share prices. Another respondent stated that it is not good if Swedish companies put too much in untaxed reserves, since that limits what they are able to give back to shareholders as dividends. A third interviewee mentioned that you have to be more careful with companies from certain countries than with US or UK companies. In Sweden, for example, some companies worry more about employees than about shareholders. To summarize, even if Swedish accounting is not a problem, analysts may perceive some problems with the general political and economic environment in which Swedish companies operate.

### Additional findings from the report study

The report study provides additional support for the model presented in Figure 8.1. Reports are especially useful in evaluating what data is used by analysts, and what the output is. The reports actually constitute the output. This section begins with a depiction of what a typical analyst report contains, followed by frequencies for different items.

A typical analyst report begins with a summary or introduction, which includes the investment recommendation, estimated future EPS, and the main reasons for giving the recommendation. This is followed by a detailed qualitative discussion, where several dimension of relevance to the company analyzed are covered. Such dimensions are, for example, corporate strategy, efforts to improve efficiency, and performance by product and geographic segment. The discussion by segment is often very detailed, and includes estimates of total market development, as well as the position of the analyzed company in the total market. This is followed by the actual forecasts of financial information, such as financial statements and various ratios. The financial forecasts are based on the qualitative discussion preceding them. The forecasts form the basis for the valuation of the company stock, by the application of one or more valuation models.

### Chapter Eight

A total of ten analyst reports were included in the study. In this analysis, data used is presented as evidenced by analysts' reports, with all the potential limitations involved in using the text output rather than observing the actual process. Only the most important data sources are covered here. Additional sources are of course used by analysts. In addition, an item might have been used in the process without being mentioned in the report.

The tables below indicate how many of those reports included each of the items listed. Tables 8.15 and 8.16 are based on how many reports that included an indication that each of the items had been used. An indication would be that the item is referred to, without necessarily being included in the report.

Table 8.15. Annual Report Items Used in Analysts' Reports		
Item	Number of Reports	
Annual income statement	10	
Annual balance sheet	7	
Quarterly financial statements	8	
Segment information	10	
Per share data and number of shares outstanding	10	
Qualitative information	8	

Table 8.16. Non-Annual Report Data Used in Analysts' Reports	
Item	Number of Reports
Information about the company's products	10
Information about competitors	10
Industry and total market information	9
Macro-economic variables	9
Share price and market index information	10

Table 8.15 shows that the annual report is used to a large extent, especially the income statement, segment data, and per share data. The annual report is complemented by a substantial use of additional information sources, however, as evidenced in Table 8.16. Both these tables are consistent with, and support, the external data part of the analysis process model in Figure 8.1.

So far, the focus in this section has been on what analysts apparently use in their analysis. The next phase of the report study is to see which items are actually included in the reports, which is shown in Table 8.17.

Table 8.17 indicates the importance of the income statement, and the EPS number, in the reports. Balance sheet forecasts are not so common, however, even though most reports include a historic balance sheet.

Table 8.17. Items Actually Included in Analysts' Reports	
Item	Number of Reports
Historic income statement	10
Historic balance sheet	7
Forecast of income statement	10
Forecast of balance sheet	4
Forecast of EPS	10
Percentage changes over time included in forecasts	6
Buy, hold, or sell recommendation	5
Other type of recommendation	4
Narrative to support forecasts and recommendation	10
Future expected stock price (target price)	4

Most reports include percentage changes over time in the forecasts, but it should be noted that the fact that percentage changes from previous years are provided does not prove that forecasts are made by estimating changes from historic or current financial statements. The 'percentage change hypothesis' does appear reasonable, however. In addition, even if percentage changes are only provided for reader information, they enable the reader to evaluate the reasonableness of the forecasts. Thus, historic financial statements become valuable as a basis for forecasts, either directly or indirectly.

Many reports include explicit buy, sell, or hold recommendations. One report had no explicit recommendation. The four reports classified as other type of recommendation have recommendations that are on a scale with three or more steps, or with different scales for short, medium, and long term investing. Consequently, even if the specific words buy, sell, or hold are used, point scale recommendations are used in almost all reports.

All reports include a narrative to support the recommendation *and the fore-cast*. These narratives generally focus on the market situation for the companies' products, both general market conditions, and the companies' competitiveness. Consequently, the narratives are - at least partly - based on non-annual report information. Often there is great detail about the market conditions by product and geographic segments.

Some reports include a future expected stock price (often called target price). Recommendations are then explicitly based on comparisons between current

prices and target prices. In reports without target prices, the recommendations are based on the attractiveness of the stock at the price existing at the time of issuance of the report. For example, a buy recommendation without a target price would entail the implicit assumption that the price will rise in the future, but there is no specification by how much it will rise.

The outcome part of the model in Figure 8.1 is clearly supported by Table 8.17, and the findings in the table are also consistent with the process part. In summary, the model in Figure 8.1 is supported by the results in this report study.

# 8.2.3. Results and Implications

This Section 8.2 involves an interpretation of interview responses and analysts' reports. Relating back to hermeneutic circle, the whole is covered in Section 8.2.1, the parts are covered in more detail in Section 8.2.2, and in this Section 8.2.3 there is a move back to the whole. Here, an attempt is made at determining the implications of the results for the research issues. A discussion of validity and reliability, as well as a summary of results, is given in Section 8.3.

The model in Figure 8.1 is generally supported. Some items in the model are implicit rather than explicit for most analysts, such as the evaluation of accounting risk, the evaluation of investment risk, and the use of a risk- and return-based valuation model. However, the relevance of using these concepts to study analysts is supported in the empirical material, and the model is a useful instrument when studying company analysis.

Relating back to the external data part of the model, results show that financial statements, especially the income statement, are used since they are included in the reports. This conclusion is based on Govindarajan (1980), who says that if something is included in analysts reports, at a minimum it is considered in the analysis process. Thus, since financial statements are used, the research issues may be relevant. In addition, accounting diversity that affects the income statement is more important than diversity affecting only the balance sheet or statement of cash flows.

Risk is not explicitly mentioned by most analysts. Rather, many analysts mention comparability as the main reason for making adjustments. However, it is not entirely clear that comparability is fundamentally different from risk. Comparability deals with differences in levels (of earnings, for instance), while risk can be defined as actual or perceived 'white noise variability' (i.e.

non-systematic variability). However, stable differences in levels are not a problem, since they allow for standardized, quantitative adjustments<sup>104</sup>. Only variability causes comparability problems. Thus, when analysts mention comparability problems related to international accounting diversity, it can be seen as the diversity implicitly causing actual accounting risk. Previous research (such as Weetman and Gray, 1991) has focused on comparability issues, but it also indicates that it is not possible to make standardized adjustments for international accounting diversity.

It should also be noted that the reasoning in the previous paragraph points to the existence of actual accounting risk in at least one of the accounting systems being studied. If there was no such accounting risk, there may be differences in levels of accounting measures, but they would be easily adjusted for quantitatively. For a further discussion, and empirical testing, of these ideas, see, for example, Harris et al (1994).

It is difficult to see the impact of any particular financial theory on analysts' information processing. The dominant valuation model is to use comparative P/E-ratios. This can be construed as a model for fundamental value, based on companies' ability to generate earnings. As noted in Section 8.2.2, the use of P/E-ratios may imply a risk and return framework. This can be compared to findings by Hunter and Coggin (1988) who found that analysts are strongly influenced by popular financial theories. For example, in the 1979-1983 period, CAPM influenced many analysts. Here, we can note that no single theory has replaced the influence of CAPM, but that the general framework of risk and return still holds. In Potter and Wetherell's (1987, pp. 56-59) words, the framework of risk and return can be seen as a type of basic social knowledge or competence that analysts need in order to perform their work.

There are different types of risk concepts that can be used by analysts. Notice the distinction between investment risk and actual accounting risk, and how it relates to the distinction between permanent and temporary earnings. Investment risk is related to the level of temporary earnings in relation to the level of permanent earnings<sup>105</sup>. Accounting risk, on the other hand, is related to

accounting diversity would be trivial.

<sup>&</sup>lt;sup>104</sup>The reasoning exhibited here assumes that users have knowledge about the differences in levels, as well as about the implications of these differences. For example, if US GAAP earnings are always 15% above Swedish earnings (for all companies), adjusting for

<sup>&</sup>lt;sup>105</sup>The level of temporary earnings is a proxy for variability in value creation, and therefore a proxy for variability in returns. It should be noted, however, that according to CAPM only systematic variability (which is correlated with the market index) is interpreted as risk by investors.

how close reported earnings are to 'economic earnings'. 'Economic earnings' include both permanent and temporary earnings.

The various risk concepts in the process part of the Figure 8.1 model have implications for the research issues. The implied consideration of accounting risk by analysts leads to the following conclusion: Differences between national accounting systems in terms of actual or perceived accounting risk does have an impact on capital market users of accounting.

Accounting risk can emanate from diversity in principles, disclosure, audit, or in other areas (for example timing, terminology, and format). Analysts are well aware of the existence of accounting principles diversity. Quantitative adjustments are, however, only seen as necessary for companies from some countries (e.g. Germany and Switzerland). Swedish accounting is relatively close to US GAAP or IAS, supporting the argument that Swedish companies have borne the main cost for accounting diversity, rather than relying on analysts to do it. For Swedish companies, adjustments are made in a few areas, mainly in the calculation of tax expense. Appropriations to untaxed reserves was clearly a problem for some analysts before it was removed. This supports the action taken by Redovisningsrådet in removing untaxed reserves in its first recommendation.

There are indications that disclosure diversity matters in some cases, although Swedish companies generally have adapted their disclosure levels to the requirements of international capital market users. Audit diversity is not seen as a problem by interviewees. Diversity in timing of financial statements can be a problem, but it is not for Swedish companies. Diversity in terminology and financial statement formats is noted by interviewees, but is not considered a problem.

A concrete example where analysts see actual accounting risk is for reported (i.e. non-DVFA-adjusted) German accounting numbers. Both German and non-German analysts see problems with the usefulness of those numbers. The existence of such actual accounting risk is corroborated by Harris et al (1994), who show that unadjusted German numbers have lower value-relevance (cf. Section 3.2.3) than adjusted German numbers and US numbers.

Regarding perceived accounting risk, there is evidence that analysts do perceive different levels of accounting risk in financial statements from different countries, and that this perception matters to analysts. This is further supported by a story given by many interviewees, namely that German (in some cases Swiss, Italian, or French) accounting is less useful for analysts than ac-

counting from the US or UK, or reporting that is based on IAS's. Analysts' belief in this story is strong enough to affect their international company analysis. Swedish accounting is seen as belonging to the 'good' group, so it is not very problematic. Large Swedish companies have consciously made a choice to be there. According to analysts, the companies were forced to make this choice in order to attract international capital (see also Chapter Six). However, analysts receive additional comfort when Swedish companies report according to US GAAP or IAS's.

To conclude, both actual and perceived accounting risk matter to analysts. The accounting risk of Swedish accounting has some impact on non-Swedish analysts.

The fact that analysts use risk- and return-based valuation models, leads to the conclusion that accounting can be useful *either* in helping to forecast return *or* in helping to reduce risk.

As a tool to reduce risk, accounting is used as a basis for forecasts, and for feedback on past forecasts. In this way, accounting diversity may affect capital market users. The fact that forecasts are made using detailed information about product and geographic segments suggests that international diversity in this particular type of disclosure does affect analysts. The central item for forecasts is EPS, and it is central since the most common valuation model is the use of P/E-ratios. If EPS numbers in historic and current financial statements are affected by accounting diversity - and we assume this effect to carry forward to forecasts - then we see a direct effect of accounting diversity on valuation models used.

Another finding in Section 8.2.2 is that interviewees can be categorized based on how they cope with international accounting diversity. Analysts can cope by having a multi-principles capability, by restating financial statements, or by using a top-down approach (cf. Choi and Levich, 1990). All three categories can be found among the interviewees. Analysts adopting the three types of coping behavior are affected by international accounting diversity in different ways. In the latter approach, direct comparison between companies from different countries is avoided. However, as noted in Section 8.2.2, the direct comparison is, if it can be done, a more effective investing and analysis approach. Direct comparison is done through either a multi-principles capability, or by restatement. The top-down approach avoids the problem of accounting diversity, but at a cost<sup>106</sup>.

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<sup>&</sup>lt;sup>106</sup>This reasoning assumes that stock markets in different countries have similar pricing structures. If an investor can compare accounting numbers across countries, but there is

Categorization of interviewees is also done in Chapter Nine. However, the categories used are different in that chapter, due to the difference in operationalization of the research issue. Here, we are interested in how analysts are affected by international accounting diversity when they attempt to compare companies from different countries. Therefore, the categories here are narrowly defined in terms of how analysts cope with accounting diversity in their analysis process. In Chapter Nine, on the other hand, categories are broadly defined in terms of overall approach to accounting and the analysis process. In that chapter, we are interested in the extent to which one can find differences on such an overall level between analysts from different countries.

## 8.3. Conclusion

This section contains a summary of the main findings from Sections 8.1 and 8.2. Note that the model and structures developed in Section 8.2.1 are supported by empirical findings in both Sections 8.2.2 and 8.1. In addition, a discussion of validity and reliability for results in those two sections is included here.

In conclusion, there are strong reasons to believe that analysts are affected by international accounting diversity. Based on the assumption in Section 3.2.1, that analysts are a proxy for other capital market users of accounting, this conclusion applies to investors as well.

The first precondition for the conclusion is that annual reports are actually used by analysts. That this is the case is shown in both Section 8.1.1 and 8.2.2. The effect of international accounting diversity is shown in several different ways. Section 8.1.3 shows that analysts see accounting harmonization as desirable. Sections 8.1.2 and 8.2.2 show that analysts make adjustments for and consider international diversity in accounting principles, disclosure levels, and formats of financial statements. These sections also show that analysts perceive that differences exist between accounting based on US GAAP/IAS and Swedish rules. A further conclusion is that Swedish accounting is seen as less problematic than that from some other countries. This is because Swedish companies have borne the major part of the cost of international accounting diversity.

international diversity in how those numbers are utilized to price stocks, the usefulness of the accounting number comparisons can be questioned.

The conclusions given above are directly related to research issue number 2, as stated in Section 1.1. Apart from these conclusions, there are other results obtained in Sections 8.1 and 8.2. These are, for example:

- 1. A model for how financial analysis is done is developed (Figure 8.1), which is related to research issue number 1. The model is empirically supported in Sections 8.1.1 and 8.2.2.
- 2. The concepts of actual and perceived accounting risk are developed, and they are supported in Sections 8.1.1, 8.1.2, and 8.2.2. These concepts are further discussed in Chapter Ten.
- 3. It is shown in Sections 8.1.1 and 8.2.2 that financial statements are used as a basis and feedback for forecasts.
- 4. Company valuation is driven by earnings, and P/E-ratios constitute the most common valuation model. This is shown in both Sections 8.1.1 and 8.2.2. This is consistent with assumptions made in the literature, see for example Foster (1986).

Result number 1 can be a useful instrument in the general study of analysts. Results number 2 through 4 are especially useful when studying the role of accounting in financial analysis. There are, for example, implications of these findings for market-based accounting research, which are further discussed in Chapter Ten.

With regard to result number 3, we can note that the empirical material supports, to some extent, the notion that financial statements are used as a basis for forecasts, and that changes from current financial statements are sometimes forecast rather than absolute numbers. Thus, even though financial statements do not contain any information directly applicable to the future, they can still be useful in reducing risk in forecasts by providing a reliable starting point for forecasts.

A separate type of finding is that it is possible to see different categories of analysts in terms of how they approach the issue of international accounting diversity. These categories can be related to previous literature, and can be the subject of future research efforts. It would be an interesting and promising area to investigate further.

As stated in Section 1.2, one research aim of the dissertation is to develop a research framework for the empirical testing of international accounting diversity. Section 3.1.1 points out that the framework chosen can be categorized as an eclectic research approach. The usefulness of such an approach is briefly discussed here, since two separate research methodologies are applied in this chapter (cf. the introduction to the chapter). The analysis based on the

interview questionnaire (Section 8.1) gives an overview of the material, and some degree of 'objective' generalizability of the results. It is useful for issues such as how common it is to use the income statement, or how many analysts are desiring accounting harmonization. The analysis involving the generation of categories (Section 8.2), on the other hand, can pick up structures that are not apparent in the first methodology, such as the underlying analysis approaches used by different analysts. These issues are discussed further below, and in Section 10.3.

The issue of reliability and validity of the results and conclusions obtained in Chapter Eight is a matter for discussion. This issue is treated differently for the analysis in Sections 8.1 and 8.2, respectively. Validity in the Section 8.1 analysis appears to be high, since the results are largely in agreement with previous studies of analysts and investors (Arnold et al, 1984; Choi and Levich, 1990; Day, 1986; Olbert, 1992). Reliability in this analysis is ascertained in the sense that we know what the interviewees said, and that we can count how many interviewees mentioned a certain item. The link between the responses and the underlying social structures is less certain, however.

The concepts of reliability and validity are used somewhat differently in the Section 8.2 analysis. As indicated in Section 3.3.2, for example, validity in hermeneutics (which is one source of inspiration for the analysis) is ascertained through the reasonableness of findings. Overall, the results and conclusions from Section 8.2 do appear reasonable<sup>107</sup>. In addition, the results are internally consistent, and do provide a deep understanding of the company analysis process (cf. Alvesson and Sköldberg, 1994, pp. 171-175). In discourse analysis, validity is ascertained by results being logically coherent, leading to new questions rather than complete answers, and being fruitful in helping us understand the world (Potter and Wetherell, 1987, pp. 169-172). These three criteria are met in this study.

For both analysis approaches used in this chapter, we can say that the given conclusions are not *proven*. For the first approach, this is because we do not know exactly how the empirical material is related to underlying social structures. In the second approach, the criteria for validity are such that the results do not give proof about social structures. However, triangulation can be used as a means to increase reliability and validity (Kirk and Miller, 1986, pp. 41-42; Potter and Wetherell, 1987, pp. 63-64). In this chapter, the main conclu-

<sup>&</sup>lt;sup>107</sup>Of course, the ultimate arbiter of the reasonableness of findings is the recipient of this research, i.e. the reader of this dissertation. An attempt has been made to provide a detailed enough depiction of the research process to allow for the reader to agree or disagree that the results appear reasonable.

sions are supported by two separate empirical studies (interviews and the report study), as well as two separate analysis approaches (in Sections 8.1 and 8.2, respectively). Thus, these conclusions - especially the one that accounting diversity has an impact on stock market users of accounting - do have strong support in the empirical material.

When analyzing the interview responses, it must be considered that interviewees may have strong incentives not to tell the truth. Incentives, as analyzed in Section 8.2.2, are useful to evaluate reliability and/or validity of the results. In this study, there is nothing obvious to indicate that analysts' incentives do create problem. However, we cannot say for certain what the effects of incentives are without undertaking further research.

Analysts can also be affected by what they believe the interviewer wants to hear. This could, in turn, be affected by the background or personality of the interviewer, leading to reliability problems in the interviews. This problem is mitigated by the inclusion of the report study, since the content of reports is not influenced by the researcher.

Another problem could arise if analysts just follow a standard mold for doing analysis, which is independent of the analysts' underlying beliefs about accounting and other aspects of analysis. The standard mold could be created, for example, by:

- Analysts' belief about what readers expect (e.g. rational reasoning based on numbers). This is related to analysts' incentive structure vis-à-vis their customers.
- The way analysts learn how to do their job. This is related to their shared frame of reference, discussed below.

One way to evaluate the potential magnitude of this problem is to go through the results to see if they appear to be the product of a standard mold. One could argue, for example, that the analysis process model in Section 8.2 appears to be a rational structure, rather than being externally imposed on analysts. Further, the finding that *different* categories of analysts can be identified (Section 8.2.2) contradicts the hypothesis of a standard mold.

As suggested, interviews are limited by the fact that interviewees can give a false picture of what they think. This applies, of course, to analysts' reports as well. However, these reports are different, in the sense that they *are* analysts' actions, rather than a description of their actions. Reports are the end products for analysts, and while they do not have to reflect the analysis process, they are what is actually produced by analysts. Thus, what is said in these documents shows how analysts add value for their customers. The

documents are, however, limited by what is excluded (such as a description of the underlying company valuation process). Thus, the reports only shows a section of the whole that we are interested in (Holme and Solvang, 1991, pp. 137-138).

The relevance of using reports to study the company analysis process is also discussed in Govindarajan (1980). He points out that reports are formal explanations for recommendations, rather than a protocol of the process leading to the recommendation. However, everything included in the report must have been considered useful by the analysts (even though the opposite does not apply, i.e. everything considered useful is not included). Either it is directly useful in the company valuation process, or it is useful in justifying the recommendation to the readers of the report. Thus, reports are relevant study objects when research on analysts is undertaken.

Potter and Wetherell (1987, pp. 39-43, 67) point out that variation in accounts analyzed is important, and they warn against the danger of researchers' suppression of account variability. One way such suppression could occur in this study is if the structure developed in Section 8.2.1 excessively limits what the researcher discovers in Section 8.2.2. This may be less of a problem in this study than in the type of sociological studies undertaken by Potter and Wetherell<sup>108</sup>. The reason is that the interviewees in this study have similar frames of references and are specialized experts in a certain field. This is actually the very reason why we are able to make a relatively detailed model for how the company analysis is done. The similarities are noticeable in the material, but there is still some variation found in analysis approaches, as well as in methods to overcome issues of international accounting diversity.

The similarities in frames of reference can be tied into Moore and Carling's (1982) framework of how data is turned into information by receivers (Section 1.3). They say that language is most successful when sender and receiver have shared perceptions of the world (ibid., pp.172-173). This is assumedly the case here, and it facilitates the analysis. There are also additional complexities in the situation studied here. Annual report analysis has an additional layer of complexity when compared to language use. Not only is the annual report used to inform the reader about the current (historic) state of the company, but the annual report is also used to forecast the future. This adds to the complexity of the model of the analysis process. Thus, there is potentially high variability in this communication (ibid., 1982, pp. 180-Working against this variability is the shared frame of reference.

<sup>&</sup>lt;sup>108</sup>Studies done by Potter and Wetherell focus on the general population, and interviewees are not experts in the studied field.

Maybe it is necessary to have such a shared frame when dealing with complex and potentially highly variable concepts.

An additional point that strengthens the conclusion is that since interviewees who *are* following a Swedish company are selected, the impact of international accounting diversity may be underestimated. This is because those analysts that do not follow foreign companies may have chosen not to do so because they foresaw problems with the foreign accounting framework. Those analysts are likely to have encountered larger difficulties with international accounting diversity had they followed foreign companies, than the analysts included in this study.

Generalizability is often an important characteristic in research studies. Results from Section 8.1 are generalizable, if the sample studied is representative of a larger population. As noted in Section 5.1, the sample is not randomly selected, but neither is there anything to indicate that results are driven by sample biases. If so, the findings are generalizable to the population of non-Swedish, sell-side analysts, that cover Swedish companies. However, it is unclear whether results are generalizable to the larger population of analysts that cover international companies, that is companies outside their home countries, or to all financial analysts. There are some indications that such a generalizability is possible. First, there is nothing immediately obvious that distinguishes analysts following companies from those that follow companies from other countries. In fact, all analysts included here also follow non-Swedish companies, in many cases companies from several different countries. Further, the sample does not consist of Swedish expatriates (only one of the interviewees has Scandinavian (Danish) origin, while the other are American, British, or German). Second, as noted above, results are generally consistent with previous studies on analysts in several different countries (including the United States, the United Kingdom, New Zealand, the Netherlands, and Sweden).

In the analysis where categories are generated, the concept of generalizability has a different usage than it has in the analysis using pre-defined categories. For one, it is not possible to quantify a probability level for generalizability, as is done in the statistical study in Chapter Seven. Generalizability requires some degree of objectivity, since the core aspect of generalizing is to apply structures obtained in a study to subjects not included in the study. Thus, these structures must go beyond and be independent of the studied individuals. To the extent that the categories generated represent social structures (as defined in Section 3.1.2), generalizability based on this analysis is possible.

### Chapter Eight

The results of the generating categories analysis can be said to have *relative* rather than *absolute* objectivity (Alvesson and Sköldberg, 1994, pp. 121-122). The structures or results obtained in Section 8.2 are not objective in the sense that they are proven to be 'true'. They are possible interpretations of the company analysis process, selected from a potentially infinite number of such interpretations<sup>109</sup>. They are, however, objective in the sense that they are shared by analysts included in the study, and are applicable to other analysts than those included in the study.

To conclude, it is possible to generalize the results of the analysis in Section 8.2 to a larger population of analysts (and investors). Since the results do appear reasonable, and most analysts (and investors) have a similar frame of reference, it is likely that the results are generalizable. What we do not know, however, is to what extent the generalizability applies. Rather, an evaluation of the extent can, at this stage, only be based on judgment.

<sup>&</sup>lt;sup>109</sup>Even if a potentially infinite number of interpretations exist, the number of reasonable interpretations of a specific historic event is substantially more limited.