

Chapter Four

Empirical Background

The discussion of the empirical background follows the ‘boxes’ in the main model, as presented in Section 1.3, Figure 1.1. Thus, four areas are covered. These are public Swedish companies (sender, Section 4.1), non-Swedish financial analysts (receiver, Section 4.2), accounting properties (content, Section 4.3), and national environments (context, Section 4.4).

The discussion in this chapter is focused on aspects that may be useful in the empirical studies and in the analysis. Thus, it should not be seen as a general overview of an entire empirical field. Specifically, this chapter justifies, and provides an empirical framework for, the empirical studies (Chapter Five) and the analysis (Chapters Six through Nine). More detail on how this chapter relates to latter chapters is provided at the end of each of the following four sections.

4.1. Sender: Public Swedish Companies

This section gives an overview of who the senders of accounting information are. There are two aspects of senders that are especially interesting in this dissertation. First, it is *why* companies may want to direct their accounting to non-Swedish users, which is related to context. Second, it is *how* these companies may adapt their accounting to non-Swedish users, which is related to content.

Senders are Swedish companies that disperse accounting information to non-Swedish recipients, especially to analysts and investors. The potential population of senders includes publicly listed companies that issue equity or debt to non-Swedish investors⁴⁴.

At the end of 1996, there were 229 companies listed on the Stockholm Stock Exchange (Stockholm Stock Exchange, 1997). There are three different lists on the exchange. Larger companies tend to be listed on the A-list, while

⁴⁴ Private companies are also potential issuers of equity or debt, even if they do not use official exchanges as their medium. Private companies are not considered in this dissertation, however, as pointed out among the limitations in Section 1.4.

smaller companies are listed on the O- or OTC-lists⁴⁵. The statistical study (Section 5.3) includes all companies listed on the A-list, and therefore additional information on this list for the 1983-1995 period is provided in Tables 5.4-5.6. It should be noted that in 1996 the A-list represented 95% of total stock market turnover (Stockholm Stock Exchange, 1996a).

At the end of 1996, 31% of shares on the stock exchange were owned by non-Swedish investors (Stockholm Stock Exchange, 1997), and a high percentage of foreign ownership applied to both some small and large companies (Dagens Industri, 1996b). Thus, many listed companies are de facto senders of accounting information to non-Swedish investors. However, focusing on the following of Swedish companies by non-Swedish analysts gives a different picture. This is interesting since the interviews and report studies are partly focused on financial analysts.

Using Nelson's Directory (Section 5.1) and Investext (Section 5.2) it is possible to obtain an overview of which Swedish companies are followed by sell-side analysts⁴⁶ located outside Sweden. The results are shown in Table 4.1. Note that since banks and insurance companies were not included as senders in the study, they are not shown in the table. Such companies represented 13% of market capitalization at the end of 1996 (Stockholm Stock Exchange, 1996b).

As discussed in Sections 5.1 and 5.2, both Nelson's Directory and Investext were studied during 1994, and these two publications covered the 1990-1994 period. Therefore, some companies that are no longer listed are included in Table 4.1.

There are 22 companies included in Table 4.1, and they are substantially larger than the average company on the Stockholm Stock Exchange. Astra and Ericsson are the two companies with the largest following. The 22 companies have a dominant position⁴⁷ in the Swedish economy (Jönsson and Marton, 1994). The focus of non-Swedish analysts are on the very largest companies, and therefore these companies are also the focus of this dissertation.

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| Table 4.1. Swedish companies followed by non-Swedish analysts |
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⁴⁵ During 1997 some large companies switched from the A-list to the O-list for tax purposes. This movement does not affect the studies in this dissertation, however, since all empirical material was collected prior to 1997.

⁴⁶ Sell-side analysts are defined in Section 4.2.

⁴⁷ The companies are dominant in terms of their share of, for example, GDP, employees, exports, and market capitalization.

| Swedish company | Nelson's Directory ¹ | Investext ² |
|----------------------|---------------------------------|------------------------|
| AGA | 16 | - |
| ASEA (excluding ABB) | - | 3 |
| Astra | 32 | 8 |
| Atlas Copco | 12 | 2 |
| Electrolux | 13 | 6 |
| Ericsson | 36 | 10 |
| ESAB | 2 | - |
| Esselte | 4 | 1 |
| Gambro | 14 | 3 |
| MoDo | 9 | 3 |
| Perstorp | - | 2 |
| Pharmacia | - | 1 |
| Procordia | 24 | 4 |
| SAAB-Scania | 5 | 3 |
| Sandvik | 10 | 4 |
| SCA | 8 | 3 |
| Skanska | 3 | - |
| SKF | 17 | 5 |
| Stora | 15 | 2 |
| Svedala | 1 | - |
| Trelleborg | 8 | 2 |
| Volvo | 20 | 5 |

1. Nelson' Directory lists individual analysts, so this column shows the number of analysts. Thus, there may be more than one analyst from each financial firm.

2. Investext presents following by firm, not by individual analyst. Thus, this column indicates the number of firms where at least one analyst follows the Swedish company.

Now, when relevant Swedish companies are identified, the next issue is what would make these companies target their accounting to non-Swedish users. There could be both financial and non-financial reasons (this is discussed further in Chapter Six). Non-financial reasons are, for example, marketing reasons, which should be related to the percentage of non-Swedish sales to total sales (shown in Table 4.2).

Financial reasons include obtaining capital from non-Swedish investors. These companies are large in relation to the Stockholm Stock Exchange, and may therefore want to target investors on other markets. This is indicated by these companies' capitalization and share turnover in relation to the total Stockholm stock market numbers, presented in Table 4.2. Table 4.2 also shows which of these companies that are listed on a non-Swedish stock market, and the percentage of non-Swedish ownership. The first three columns in the table relate to reasons for companies to go beyond the Swedish context, while the last two columns show effects of such a strategy.

Table 4.2. Overview of Swedish companies followed by non-Swedish analysts

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| Company | Reasons for companies to go beyond the Swedish context | | | Effects of companies' going beyond the Swedish context | |
|-------------|--|---|---|--|-------------------------------------|
| | Percentage of non-Swedish sales | Capitaliz./total market capitaliz. ¹ | Share turn-over/ total market turnover ² | Shares listed on non-Swedish exchange ^{1,5} | Percentage of non-Swedish ownership |
| AGA | 88.0 ⁹ | 1.9% | 0.9% | 4 | 38.0 ⁶ |
| ASEA (ABB) | 91.8 ⁷ | 5.2 | 4.3 | 4 | 34.3 ⁶ |
| Astra | 91.1 ⁷ | 14.3 | 13.1 | 2 | 45.4 ⁶ |
| Atlas Copco | 96.0 ⁷ | 1.6 | 1.7 | 3 | 35.9 ⁶ |
| Electrolux | 92.0 ⁷ | 1.8 | 3.1 | 5 | 48.4 ⁶ |
| Ericsson | 94.0 ⁷ | 11.0 | 13.8 | 5 | 50.0 ⁶ |
| ESAB | 95.0 ⁹ | 0.3 ⁹ | 0.1 ⁹ | 0 ⁹ | N/A |
| Esselte | 94.5 ⁸ | 0.3 | 0.2 | 1 | 38.9 ⁶ |
| Gambro | 98.0 ⁸ | 1.1 | 0.4 | 2 | 7.0 ⁸ |
| MoDo | 85.0 ⁸ | 1.1 | 3.0 | 1 | N/A |
| Perstorp | 89.0 ⁸ | 0.5 | 0.2 | 2 | N/A |
| Pharmacia | 90.7 ^{3,8} | 2.9 ³ | 0.8 ³ | 2 ⁹ | 13.6 ⁹ |
| Procordia | 48.4 ⁹ | 8.8 ⁹ | 3.1 ⁹ | 1 ⁹ | 1.7 ⁹ |
| SAAB-Scania | 78.0 ⁹ | 3.0 ⁴ | 4.0 ⁴ | 1 ⁴ | 18.0 ^{4,8} |
| Sandvik | 93.0 ⁷ | 2.8 | 2.1 | 2 | 18.0 ⁷ |
| SCA | 91.0 ⁷ | 1.8 | 1.7 | 3 | 16.0 ⁷ |
| Skanska | 39.0 ⁷ | 2.3 | 1.6 | 0 | 8.1 ⁷ |
| SKF | 94.4 ⁷ | 1.3 | 2.0 | 4 | 42.1 ⁶ |
| Stora | 84.0 ⁷ | 2.2 | 2.8 | 2 | 32.0 ⁷ |
| Svedala | 87.9 ⁸ | 0.3 | 0.4 | 0 | 52.6 ⁶ |
| Trelleborg | 57.0 ⁷ | 0.7 | 2.7 | 1 | 23.6 ⁷ |
| Volvo | 88.8 ⁷ | 5.5 | 8.8 | 7 | 42.9 ⁶ |

1. As of 12/31/95. Source: Stockholm Stock Exchange, 1996a.
2. For the 1995 calendar year. Related to A-list turnover. Source: Stockholm Stock Exchange, 1996a.
3. Applies to Pharmacia-Upjohn.
4. Applies to Investor, SAAB-Scania's parent company.
5. Indicates the number of non-Swedish exchanges that the company is listed on, including unofficial listings.
6. As of 6/30/96. Source: Dagens Industri, 1996b.
7. Source: The company's 1996 annual report.
8. Source: The company's 1995 annual report.
9. Source: AGA, Investor's and Pharmacia's 1994 annual reports, ESAB's 1992 annual report, Procordia's 1991 annual report.

Table 4.2 shows that these companies may have both marketing and financial reasons to go beyond the Swedish context. The Stockholm Stock Exchange may be too small for several of these companies, but especially for Astra, Ericsson, and Volvo. The first two also have the largest analysts' following, as shown in Table 4.1. The fact that most companies are listed on at least one non-Swedish exchange, and the high percentage of non-Swedish ownership for many of the companies, show that these companies actually have left the specifically Swedish context.

The partial focus on non-Swedish investors, can be expected to affect accounting by Swedish companies. This effect can happen on two separate levels. First, there is a system level, i.e. that the entire Swedish accounting systems changes. As shown in Section 4.3, this seems to be happening. Sec-

ond, there is the individual company level, i.e. that companies adapt their own accounting to the requirements of non-Swedish users.

Swedish companies are assumedly driven to adapt their accounting due to an aspiration to attract non-Swedish investors. They need international capital, since they are large in relation to the size of the domestic stock market. Thus, they may decrease their cost of capital through adapting their accounting. To what extent this actually happens is discussed in Chapter Six.

To conclude, this section shows that Swedish companies both have reasons to go beyond the Swedish context, and that they actually have done it. Thus, there are potential incentives for adapting Swedish accounting to non-Swedish users, both on a system and individual company level. These points provide a justification for the analysis done in Chapter Six. The point on system level adaptation justifies the analysis in Chapter Seven. In addition, this section provides a delimitation of which Swedish companies to focus on. While the entire population of A-listed companies are included in the statistical study (Section 5.3), such a delimitation is especially useful in the Swedish interviews (Section 5.1) and the annual report study (Section 5.2). In the latter two studies, the selection of companies was made from among those identified in Tables 4.1 and 4.2.

4.2. Receiver: Non-Swedish Financial Analysts

There are many potential receivers of Swedish accounting information. However, in line with the research issues presented in Chapter One, the focus here is on non-Swedish stock market investors and analysts. Since analysts constitute a clearly definable group, and since they are likely to be the most intense users of accounting, they are used as a proxy for investors. Thus, the receivers focused on are non-Swedish financial analysts that follow Swedish companies.

Analysts can be classified according to several dimensions, including:

- What type of employer they work for.
- What type of analysis they conduct.
- Geographic location.
- How they are organized inside their firms of employment.

As a background to which type of employers analysts can work for, an overview is given of the relevant parts of the financial service industry. The entities involved in the information transfer from corporations to individuals making investment decisions are shown in Figure 4.1.

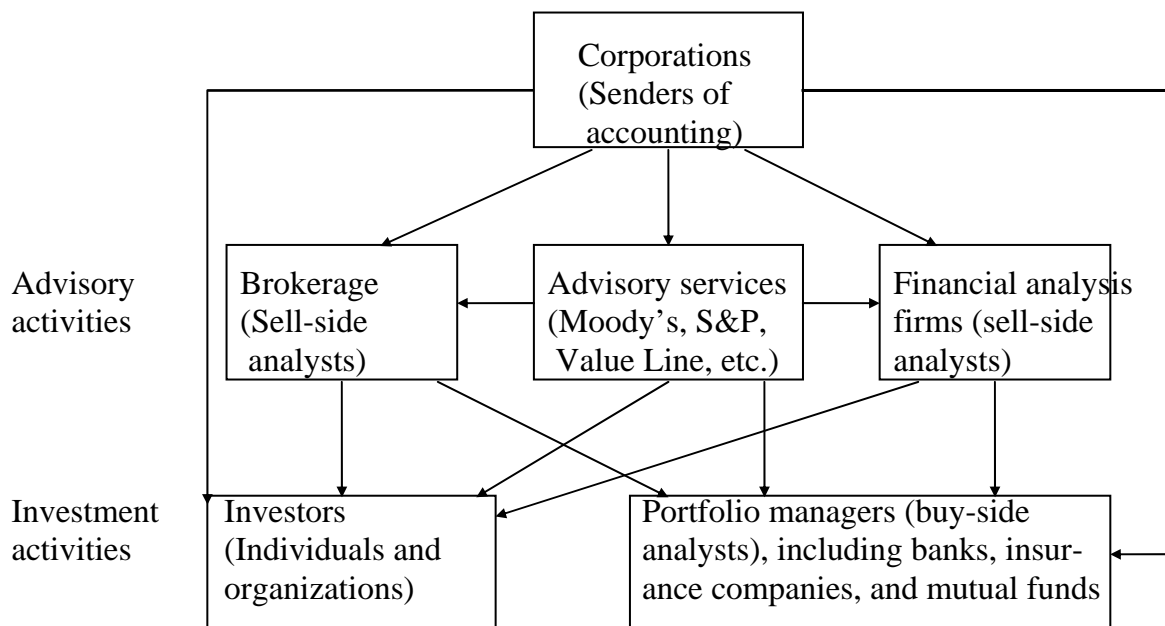


Figure 4.1. Overview of information transfer between corporations, financial intermediaries, and investors. Adapted from Williams et al, 1996, p. 114.

Corporations as senders are discussed in more detail in Section 4.1. The rest of Figure 4.1 consists of receivers of accounting. There are four main functions performed by financial intermediaries regarding equity securities. These are issuing, dealing, managing, and advising. Brokerage houses are the dealers, but they also often have their own financial analysts. They are called sell-side analysts, since they work for employers that sell securities. Thus, brokerage houses have both dealing and advisory functions. Pure advisory functions are performed by advisory services and financial analysis firms. Sell-side analysts are also employed by financial analysis firms, which is discussed further below.

Investors are the ultimate providers of capital. However, to a large extent investors go through portfolio managers in their investing activities. Portfolio managers often employ analysts, which are then called buy-side analysts. Portfolio managers perform the managing function with regard to equities. Financial intermediaries can combine the four functions in different ways, and they can also be combined with other functions (Koguchi, 1993). In the United States and the United Kingdom investment banks are common. These entities perform all four functions related to equities (and other securities), but do not have commercial banking activities. In, for example, Sweden and Germany, on the other hand, investment banking is often combined with commercial banking. Further, as indicated by the figure, there are firms that specialize in only one of the functions, for example financial analysis, or port-

folio management. This overview of financial intermediaries is relevant for the study in selecting a sample of non-Swedish interviewees and reports.

The distinction between sell-side and buy-side analysts is also relevant for the selection made in the study. As noted in Schipper (1991, p. 106) there are some fundamental differences between these two groups. Sell-side analysts work for employers that make money from commissions earned in securities trading. Thus, even though they produce reports that are used to evaluate investment potential of securities, their employers do not make money from investing per se. Buy-side analysts, on the other hand, work for employers that directly use the reports produced. Another difference is that reports and recommendations issued by sell-side analysts are public, while those issued by buy-side analysts are not.

The differences between the two groups of analysts may lead to different incentives affecting them. Buy-side analysts are mostly affected by their employers, who desire high quality company analysis⁴⁸. Sell-side analysts are affected by three separate incentives. Users of their reports and recommendations want high quality analysis. Employers want to increase trade, which may be obtained through frequent changes in analysts' recommendations. Companies' analyzed want a positive bias in the analysis. At least, companies can be expected to dislike sell recommendations. The potential effects of such incentives need to be considered during the analysis of interviews and analysts' reports.

In this study, a selection of analysts to interview is made primarily from sell-side analysts (Section 5.1). In Figure 4.1, analysts at both brokerage and financial analysis firms are classified as sell-side. This is because for both types of firms analysts' reports and recommendations are made public. A similar classification is used in Nelson's Directory. Even though it is not noted in Figure 4.1, there are analysts working in advisory service firms. They are not included in this study, however, since they tend to be focused on either fixed-income securities (Moody's and S&P) or on overviews of large populations of companies (Value Line).

The second dimension for classifying analysts is by what type of analysis they do. The main types are fundamental, quantitative and technical. The most common of these is fundamental, and this applies to several different countries studied (Arnold et al, 1984; Vergoossen, 1993; Olbert, 1992). This justifies undertaking a study on analysts with the stated research issue, since

⁴⁸ High quality company analysis is that which forecasts future stock prices with a high degree of accuracy.

it is only in fundamental analysis that annual reports are potentially used to any substantial degree. Among the analysts interviewed in the dissertation, all use fundamental analysis.

The third dimension is geographic location, and this applies both to location of the analyst, and to the location of the headquarters of the firms that employ analysts. In both these respects, New York and London are important centers. These two cities represent a substantial share of international company analysis. As noted in Section 3.1.3, analysts located in the United States, the United Kingdom, and Germany are selected in the study. The resulting selection was done from the three cities of New York, London, and Frankfurt. Whether there are any fundamental differences between analysts and firms based in the different countries is discussed further in Section 4.4.

The fourth dimension for classifying analysts is how they are organized within the firms they work for, i.e. what specialization they have. The main alternatives are that they analyze companies by industry, or by country. For this study, it is probable that analysts organized by industry are more relevant. They will face potential problems with accounting diversity, which country experts will not.

So, who is included in the population of receivers that are relevant for this dissertation? The population is identified using Nelson's Directory and Investext (see Section 4.1). The Swedish companies followed by this population of analysts are shown in Table 4.1. Tables 4.3 and 4.4 provide additional information on the population. It should be noted that Nelson's Directory identifies individuals, while Investext identifies financial firms.

The US and UK dominance in international analysis is obvious from Tables 4.3 and 4.4. It should be noted that since both Nelson's Directory and Investext are produced in the US, there may be a bias in the selection. However, even analysts working for Continental European firms tend to be based in London, which supports the conclusion that the two countries mentioned have a strong position. Further, it is supported in the interviews, where analysts working for German firms state that there is a clear focus on the analysis of German companies, while at least some of the US and UK firms have an international focus in their analysis. A different quality issue is that Investext is far from complete, in the sense that reports are missing, even among US reports. It is still considered useful, however, since there is nothing to indicate any particular bias in the selection.

Table 4.3. Overview of Analysts from Nelson's Directory

| Panel A: Geographic Location of Analysts | | |
|---|---------------------------|----------------------------|
| <u>Country/City</u> | <u>Number of Analysts</u> | <u>Percentage of Total</u> |
| United States | 30 | 28.6 |
| New York, NY | 22 | 21.0 |
| Boston, MA | 5 | 4.8 |
| Baltimore, MD | 1 | 1.0 |
| Warren, NJ | 1 | 1.0 |
| Parsippany, NJ | 1 | 1.0 |
| United Kingdom (all are in London) | 74 | 70.5 |
| Germany (located in Frankfurt) | 1 | 1.0 |
| Total | 105 | 100.0 |

| Panel B: Geographic Location of Head Offices of Analysts' Employers | | |
|--|------------------------|----------------------------|
| <u>Country</u> | <u>Number of Firms</u> | <u>Percentage of Total</u> |
| United States | 23 | 62.2 |
| United Kingdom | 9 | 24.3 |
| Germany | 1 | 2.7 |
| France | 1 | 2.7 |
| Japan | 1 | 2.7 |
| Switzerland | 1 | 2.7 |
| Total | 37 | 100.0 |

| Panel C: Number of Analysts That are Industry Versus Country Specialists | | |
|---|---------------------------|----------------------------|
| <u>Specialization</u> | <u>Number of Analysts</u> | <u>Percentage of Total</u> |
| Industry | 95 | 90.5 |
| Country (all are located in London) | 10 | 9.5 |
| Total | 105 | 100.0 |

| Table 4.4. Overview of Reports and Firms from Investext | | | | |
|--|------------------------|-------------------------|--------------------------|---------------------------|
| <u>Geographic Location of Firm Head Office</u> | <u>Number of Firms</u> | <u>Percent of Firms</u> | <u>Number of Reports</u> | <u>Percent of Reports</u> |
| United States | 11 | 45.8 | 23 | 34.3 |
| United Kingdom | 6 | 25.0 | 24 | 35.8 |
| Italy | 2 | 8.3 | 2 | 3.0 |
| Switzerland | 2 | 8.3 | 13 | 19.4 |
| France | 1 | 4.2 | 1 | 1.5 |
| Japan | 1 | 4.2 | 3 | 4.5 |
| Netherlands | 1 | 4.2 | 1 | 1.5 |
| Total | 24 | 100.0 | 67 | 100.0 |

The difference between Panels A and B in Table 4.3 indicates that many US firms do their analysis of Swedish companies from London rather than from New York⁴⁹, which indicates the strong global position of US firms. There are

⁴⁹ This is indicated by the fact that UK *analysts* make up 70.5% of the total (Panel A), while US *firms* make up 62.2% (Panel B).

also some UK firms that do financial analysis in New York. Thus, New York and London are highly integrated.

Table 4.3, Panel C shows that analysis by country is only done by London analysts. This is supported by the interviews, where several respondents said that there is a general difference between how analysts are organized in New York and in London.

This section is useful for the studies undertaken in several ways. The population of analysts and reports to select from in Chapter Five is delimited. Structures within this population are identified, which assists in the selection. An example of one such structure is that some London analysts are organized on a country basis, which is likely to lead to less exposure to international accounting diversity issues. In the analysis of interviews, it is helpful to note the potential incentives that analysts face.

It is shown that the US and UK are dominant when it comes to non-Swedish analysis of Swedish companies. Thus, the inclusion of these two countries in the study is justified. The strong position of these two countries is useful for the discussion of the contextual setting in Section 4.4. Further, it suggests that adapting to ‘international’ accounting rules means adapting to US or UK accounting. Especially US GAAP can be seen as an international standard, which is useful in the analysis in Chapter Six. Finally, this section indicates that New York and London are integrated in terms of firm activity, and that the two cities are likely to be contextually similar. This is useful in the Chapter Nine analysis.

4.3. Content: Accounting Properties

This section gives an overview of accounting properties, i.e. what the content of the accounting reports issued by Swedish companies actually is. Two aspects are covered. First, the issue of what differences exist between accounting in Sweden and in other countries is covered. Second, the issue of changes over time in Swedish accounting is covered. Issues relating to differences in underlying views on accounting are discussed in Section 4.4.

International accounting diversity may exist in several dimensions. One dimension is which type of accounting aspect is affected. Here, there are differences in terms of accounting principles, disclosure levels, auditing practice, and other areas (Choi and Mueller, 1992, pp. 404-433). Other areas include, for example, differences in format, timing issues, and terminology. Another dimension is whether differences exist in regulation, or in practice.

Even though these should be correlated, practice does not always follow regulation (Flower, 1994, pp. 22-25).

Differences in regulation of accounting principles and disclosure levels are reviewed in many different sources. Examples include Coopers and Lybrand (1991), Alexander and Archer (1992), and Haller et al (1998). Regulatory differences between Sweden, the United States, the United Kingdom, and Germany, in terms of principles, disclosure, auditing, and other areas, can also be deduced from country-specific sources. Such sources include FAR (1997), FASB (1995), Ordelheide and Pfaff (1994), Gordon and Gray (1994), and Davies et al (1992). Based on these sources, we conclude that there *are* accounting differences between the countries included in the study.

The existence of international accounting differences in actual practice between the four countries in the study is shown, for example, in Kim (1996). Kim shows differences in terms of both accounting principles and in terms of disclosure. Weetman and Gray (1991) show that there are actual differences in financial statements numbers, when calculated according to US GAAP, UK GAAP, and Swedish accounting rules. Further evidence is provided by the empirical studies in this dissertation.

An indication of the actual differences in net income and equity resulting from the application of Swedish accounting rules versus US GAAP and IAS's, is provided by the data used in the statistical study (see Section 5.3). Average differences are shown in Table 5.8. These numbers are based on all Swedish companies in the 1983-1995 period that provide US GAAP or IAS reconciliations. Among selected companies, US GAAP leads to both higher net income and equity than financial statements prepared according to Swedish accounting standards. IAS's also give higher net income than Swedish accounting, but the difference is smaller than for US GAAP.

A paired samples test was run to see whether the differences shown in Table 5.8 are significant. The results are shown in Table 4.5. The difference in means column shows that US GAAP/IAS numbers are higher than Swedish numbers on average. For example, US GAAP income is on average SEK 321.2 million higher than income calculated according to Swedish accounting standards.

Table 4.5. Paired samples test of differences between Swedish and US GAAP/IAS numbers

| <u>Item</u> | <u>Difference in means</u> | <u>t-value</u> | <u>Significance</u> | <u>N</u> |
|------------------------|----------------------------|----------------|---------------------|----------|
| Swedish/US GAAP income | 321.2 | 3.760 | .000 | 106 |

| | | | | |
|------------------------|--------|-------|------|-----|
| Swedish/US GAAP equity | 1545.3 | 4.645 | .000 | 106 |
| Swedish/IAS income | 38.0 | 1.442 | .168 | 17 |
| Swedish/IAS equity | 223.5 | 5.109 | .000 | 11 |

Table 4.5 indicates that there are significant differences between US GAAP and Swedish accounting. Regarding IAS numbers, the conclusion is not so clear. One can note that the differences between IAS and Swedish numbers are small compared to the differences with US GAAP. For income, for example, the differences are SEK 38 million and SEK 321 million, respectively. It should be noted, however, that the IAS sample is very small with 17 and 11 observations for income and equity, respectively.

Further evidence on the issue is given in Section 6.2.1, where a more detailed analysis of just five companies for one year is done. It shows that there are large differences between Swedish accounting and US GAAP, but that the differences often go in separate directions.

The second issue to cover in this section is how Swedish accounting has changed over time. Globally, there are attempts to harmonize accounting, where the most ambitious efforts have been carried out by the IASC, and (on a European basis) the EU (see, for example, Nobes and Parker, 1995, pp. 117-140; Radebaugh and Gray, 1997, pp. 167-197; Mueller, 1991; Wyatt, 1991).

In Sweden, there has been a continuous process of harmonization since at least 1980, first with US GAAP, and later with IASC (Jönsson and Marton, 1994). The Swedish accounting standard-setter, Redovisningsrådet, which was set up in 1989, is trying to gradually harmonize Swedish accounting with IASC. This change is also indicated by several interviewees. Among the analysts, for example, the one analyst that had followed one Swedish company over a 10-year period, did notice a change (Section 8.1.2). Further, Artsberg (1992) shows that Swedish accounting principles are now based on the matching principle, while they were formerly based on conservatism.

To conclude, this section indicates both the existence of differences in accounting between countries, and that Swedish accounting has changed over time. The first point justifies the entire dissertation, and especially the analysis done in Chapters Six and Eight. The change over time justifies the analysis done in Chapter Seven.

4.4. Context: A Variety of National Environments

In this section, the potential tension between international stock markets, and diversity in national contexts, is discussed. The increasing internationalization of stock markets should function as a homogenizing force. Meanwhile, there are national spheres that tend to maintain their national characteristics. What is of interest in this dissertation is to what extent and how national contexts differ in terms of views on, and structure of, stock markets and accounting.

As discussed in the Introduction to this dissertation, global stock markets are increasingly becoming integrated, and it is happening in several different ways. First, investors are moving across national borders. Second, issuers are offering their securities internationally. Third, financial intermediaries are turning into multinational firms.

Statistics on the first two modes of integration are provided in the Introduction. The third mode, integration of financial intermediaries into multinational firms, was noted in Section 4.2. The fact that some US investment banks are turning into multinationals is discussed by Scott-Quinn (1990). One reason behind this development is that equity investors want advice from firms that are present on several equity markets.

Another indicator of stock market integration is the correlation between stock market movements in different countries (Solnik, 1991, pp. 41-47). There are indications that many stock markets around the world are heavily influenced by what happens in New York. The view from practice is that it also applies to the Stockholm Stock Exchange (Dagens Industri, 1996a).

This integration of stock markets can be expected to lead to less international diversity among stock market participants. There are also other reasons to expect this development. Empirically, general business activities are becoming more international. Therefore, there is less of a reason to expect national differences in investment and analysis objects. If issuing firms are similar across countries, there should not be any reason for analysts to use different analysis methods to companies from different countries. Business education is also becoming more international. Thus, analysts in different countries have probably been exposed to the same theoretical frameworks in their education.

Another reason to expect stock market participants to be similar across the globe, is that they can be assumed to face similar incentives. Issuers want to minimize their costs of obtaining finance. Investors, want to maximize return

while minimizing risk. Analysts should give advice that help investors achieve such goals.

In practice, however, these homogenizing forces are contradicted by differences in national environments. There are, for example, cultural, political, and economic structures that differ between countries. A clarification of the relationship between these three items, and stock markets or accounting, is not the purpose of this study. Suffice it here to note that there *are* differences, and that attempts have been made in the literature at relating them to international accounting diversity (Bergevärn and Marton, 1995; Nobes, 1992; Perera, 1989). Culture is sometimes, using Hofstede (1991), defined as people's views and attitudes. The political and economic structures that are seen as most important for accounting are the legal system, the tax system, and the financial system.

Above, we focused on the integration of global stock markets. However, substantial differences still remain. There are, for example, differences in the sheer magnitude and scope of stock markets. For stock markets, this is evidenced by how long they have been active, number of listed companies, and turnover. In this respect the US and UK are unique (with the possible exception of Japan).

How long stock markets have been active is suggested by Garneau (1992). The Frankfurt Stock Exchange had an equity turnover of USD 1.5 billion in 1970⁵⁰. In the same year, the Stockholm Stock Exchange had a turnover of USD 0.1 billion, London had USD 10.5 billion, and New York had USD 102.5 billion. New York had a turnover of USD 43.7 billion already in 1926. The recent size of selected stock markets is shown in Table 4.6.

It is likely that, underlying differences in the size of stock markets, are views of such markets as efficient and effective media for resource allocation, and thus a willingness to let economic activity be controlled by stock markets.

The size of stock markets can be expected to affect both the functioning of the markets themselves, and the structure of the financial service industry. Large markets are more liquid, and may be more efficient than small markets. This is one of the reasons why issuing companies want to be on large markets (cf. Section 6.1). Large markets lead to a large sector of financial intermediaries, of the type depicted in Section 4.2. A large sector of financial intermediaries enables a high degree of specialization and professionalism.

⁵⁰ The translation to USD is done according to currency exchange rates in 1970, when one DEM equaled 1.44 SEK, one GBP was 12.44 SEK, and one USD was 5.19 SEK (SCB, 1972).

Table 4.6. Stock Market Comparison¹

| Stock Market | Turnover ² | Market Value ² | No. of Companies ³ |
|----------------------|-----------------------|---------------------------|-------------------------------|
| New York, US | 3082.9 | 5654.8 | 2244 |
| Nasdaq, US | 2398.2 | 1159.9 | 5122 |
| London, UK | 1138.4 | 1329.9 | 2265 |
| Tokyo, Japan | 888.4 | 3545.3 | 1791 |
| Germany ⁴ | 606.5 | 577.4 | 1622 |
| Stockholm, Sweden | 92.6 | 172.6 | 223 |

1. Source: Stockholm Stock Exchange, 1996a.

2. Figures for 1995, in billions of USD.

3. Figure for the end of 1995.

4. Many companies are traded on several German exchanges, which substantially overstates the actual number of listed companies in Germany. The actual number for Frankfurt (the main exchange) is approximately 600 companies.

This last point is not proven, but is only suggested by the size of the sector. The point is supported by the interviews, however. German interviewees mention that company analysis is developed in the US and UK, and then those countries influence analysis done in Germany. Other interviewees talk about the maturity, professionalism, specialization, and level of competition within especially US markets and financial intermediaries.

Another aspect of financial firms as employers is also indicated by interviewees, namely that incentive systems differ between countries. While US and UK sell-side analysts have monetary bonuses that are related to their role in generating revenue, German analysts do not have such bonuses. While this difference is suggested by interviewees, it is unclear whether it is actually the case. Thus, we can call it a stylized fact at this point.

In terms of stock market structure, the US and UK form one group, while Germany and Sweden are more similar to each other. This point is based both on statistics provided in this section, and on the interviews. Thus, if Swedish companies list in the US or UK, they are expected to enter a new stock market context.

The tension between homogenizing forces and national diversity is also noticeable within the accounting systems. If companies from different countries focused on the same user, actual accounting should converge. The existence of such a harmonizing force is shown by Meek and Gray (1989), Choi (1973), and in Section 6.2 of this study. There are, however, still high-level differences in accounting, such as differences in regulation, in views on accounting, and differences in accounting theory.

Countries differ in terms of how accounting is regulated (Puxty et al, 1987; Nobes and Parker, 1995; Flower, 1994). US accounting regulation is entirely focused on the needs of capital market investors. This is obvious from the fact that the capital market regulatory agency, the SEC, is the ultimate arbiter of accounting rules. In European countries there are general accounting laws that apply to companies, both public and private. This indicates that accounting is seen as having broader, societal functions. UK accounting, and the IASC has adopted this European view to the extent that it is acknowledged that non-capital market users may be relevant. Clearly, however, both frameworks focus on the needs of capital market users. In Germany and Sweden, on the other hand, the needs of non-capital market users are more concrete, as there is a connection between financial reporting and tax accounting.

Another regulatory dimension is the role of the law in the actual development of accounting rules. In both the UK and Sweden, the law is general, and detailed rules are set by mostly private-sector bodies. In Germany, on the other hand, accounting regulation is largely a legal activity.

Who sets accounting rules is related to overall views of accounting, and what accounting is supposed to accomplish. Often, there is a focus on either fairness or uniformity. Uniformity is related to objectivity. Fairness and uniformity are partly contradictory, in the sense that fairness requires some freedom for companies to adapt to their specific situation. In the UK, fairness has a strong position, as evidenced for example by the use of the concept of true and fair view in accounting (Alexander, 1993). In Germany, the focus is on uniformity, in the sense that existing rules should be followed (Ordelheide, 1993). This does not prevent German rules from giving some latitude to companies. In practice, companies are allowed to be more conservative than required, but not more optimistic (Ballwieser and Kuhner, 1994). However, when there is a specific accounting rule, it must be followed.

The US is an interesting case, since there is an attempt made there to combine fairness and objectivity (FASB, 1993). The need for objectivity is probably related to the pervasive presence of the legal system, in terms of a high incidence of civil law suits involving accounting issues. The combination leads to very detailed and comprehensive rules (see FASB, 1995). Fairness requires adaptation to particular circumstances. Objectivity requires that allowable actions are clearly identified and prescribed in advance. Thus, rules are written to cover many of the actual situations that companies are expected to encounter in practice.

Sweden is a pragmatic case, and is not easily identified as focused on either fairness or uniformity. In the Swedish accounting system companies have freedom to develop their accounting. Thus, the system is adaptable to changing circumstances and requirements. Changes in focus of the system have historically happened, as shown in Artsberg (1992), and Jönsson and Marton (1994). At present, there is a focus on fairness due to an increased focus on stock market users of accounting.

Differences are also noticeable in terms of cardinal accounting theories originating from different countries. Littleton (1953), from the US, clearly emphasizes the importance of the income statement. Thus, the flow of revenues and expenses are important, while the balance sheet is not very important (*ibid.*, pp. 26-31). Schmalenbach (1926), from Germany, include the balance sheet as an important financial statement. Even though Schmalenbach agrees that periodical profit is central, he also states that the balance sheet must be considered when calculating profit for delimited periods. It is also interesting to note that Schmalenbach emphasizes the importance of objectivity and comparability when financial statements are prepared (Asztély and Jönsson-Lundmark, 1979, pp. 16-18). A more comprehensive discussion of various German balance sheet theories is provided by Moxter (1974).

Based on high-level differences identified, attempts have been made at classifying national accounting systems (Nobes, 1992). Several classifications put the US and U.K in one group, while Germany is in another (Hatfield, 1966; Gray, 1988; Nobes, 1992, p. 96). Nobes classifies Sweden as being closer to Germany than to the US and UK. As shown in Artsberg (1992), and in Jönsson and Marton (1994), this is true historically. In the last two decades, Sweden has been moving away from a German system, towards a system more like those in the US and UK. However, there are still German influences that remain in the Swedish system. Thus, Swedish companies enter an accounting context that differs from the Swedish context when they direct their accounting to users in the US, UK, or Germany.

To conclude, the countries in the study form two definable groups. Germany is different from the US and the UK in many respects, both in terms of financial market and accounting contexts. Sweden has many similarities with Germany regarding financial markets, but is somewhere in between the two groups of countries in terms of accounting. Germany and Sweden are different in terms of the importance of uniformity in accounting, however.

The finding that national contexts do differ, justifies the analysis done in Chapters Six and Nine. The grouping of countries into two main groups, provides a framework for the Chapter Nine analysis. In addition, the finding that the Stockholm Stock Exchange is heavily influenced by New York, could create problems in the Chapter Seven analysis. This point is further noted in Section 3.2.3.