How to hedge disclosures?
IFRS 7 and Hedge Accounting - A first stocktaking
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Göteborg, 27th May, 2008

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Manuel Hausin        Christoffer Hemmingsson    Jesper Johansson
Abstract


Title: How to hedge disclosures? IFRS 7 and Hedge Accounting – A first stocktaking

Background and problem: Financial instruments are often highly complex. An effective financial presentation of the certain risks is therefore vital for the users’, especially for the investors’ understanding of financial reports for their decision-making processes. This is of special importance when it comes to hedge accounting and an understanding of the companies’ risk management policies, and how hedging affects the entities’ financial performances and risk situations. IASBs answer to this issue was the introduction of the IFRS 7 Financial Instruments: Disclosure, an accounting standard with the main goal to improve the quality of disclosed information, compulsory for all annual reports from 1st January 2007 onwards.

Purpose: The purpose of this thesis is to explore how Swedish Large Cap entities have disclosed information regarding hedge accounting in their annual reports 2007, after the implementation of IFRS 7. Furthermore this thesis evaluates how the new hedge accounting disclosure requirements are perceived by the financial analysts.

Delimitations: The thesis will only focus on that part which is presented in IFRS 7 regarding hedge accounting. The purpose is not to investigate how the companies use hedges, nor the quality of the disclosed information. Moreover, the thesis will only focus on the user’s perspective (investor).

Method: A mix between a quantitative and qualitative method have been chosen in order to fulfill the purpose of the thesis. The quantitative method was used by conducting a disclosure study. The secondary data was collected from annual reports 2007. With a qualitative method, primary data was gathered from two telephone interviews with financial analysts and one accounting specialist.

Conclusion: The findings and the analysis point out that for fair value hedges approximately 88 percent of the entities’ disclosure information correlated with IFRS 7 hedge accounting requirements. For cash flow hedges and hedges of net investments in foreign operations approximately 63 respective 81 percent of the entities provided information correlating with the requirements. Even though, different correlations regarding the standard’s requirements and the information disclosed were identified, the interviewed financial analysts did not perceive those inconsistencies as important issues for their daily work, since hedge accounting disclosure were not considered as vital information sources.

Suggestion on further research: It would have been interesting to conduct the same study for financial institutions since hedge accounting is more vital for their business. Furthermore, it would also be useful to evaluate the quality of the disclosed information, besides the quantitative aspects we have tested.
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>B/S</td>
<td>Balance Sheet</td>
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<tr>
<td>CFH</td>
<td>Cash Flow Hedge</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>FI</td>
<td>Financial Instruments</td>
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<tr>
<td>FVH</td>
<td>Fair Value Hedge</td>
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<tr>
<td>GAAP</td>
<td>General Accepted Accounting Principles</td>
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<tr>
<td>HIFO</td>
<td>Hedge of net Investments in Foreign Operations</td>
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<tr>
<td>IAS</td>
<td>International Accounting Standard</td>
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<tr>
<td>IASB</td>
<td>International Accounting Standards Board</td>
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<tr>
<td>IASC</td>
<td>International Accounting Standards Committee</td>
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<tr>
<td>IFRS</td>
<td>International Financial Reporting Standards</td>
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<tr>
<td>I/S</td>
<td>Income Statement</td>
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1 Introduction

This chapter starts with a background to the chosen subject leading to a further discussion of the thesis’s problem. Finally the purpose of this thesis will be presented and the area of research will be limited.

1.1 Background

Over the last decades the business environment has become more and more global, which has led to an increasing level of competition but also enabled entities to gain access to new customers and additional resource markets. With a growing diversity of international business operations an increase in risks naturally comes along, especially with risks related to financial issues such as fluctuating currencies, commodity prices and interest rates. Consequently, the need for entities to manage and limit those risks is vital for their medium- and long-term survival. BBC News recently titled “Weak dollar leads to EADS losses”\(^1\) meanwhile Dagens Industrri reported “SSAB klarar sig från dollarfallet”\(^2\). Those two headlines indicate the importance of an effective risk management in order to protect an organization from external risk drivers, like in those examples a decreasing value of the U.S. dollar. When companies face those kinds of risk-situations where needs arise to secure transactions from fluctuating underlying factors, a common way to deal with such issue is the usage of hedge instruments. Hedging can basically be described as an attempt to reduce the risk of an underlying transaction by concluding an adverse transaction in order to offset the risks.\(^3\) Theoretically, perfect hedging therefore compensates all potential losses but also gains, however in practice this is relatively difficult to achieve.\(^4\)

As the examples of EADS and SSAB indicate, the efficiency of hedging is ultimately affecting the financial performance of a company. Since hedging is connected with many business transactions, often central to the companies’ core business and involving large amounts of funds, it is therefore essential for the users of the financial statements (e.g. investors) to understand and evaluate the quality and impact of the entities’ hedging. However, hedge instruments itself are often complex and complicated derivates and the reporting of hedges and the correlating corporate risk management policies is the quintessence of hedge accounting.\(^5\) For many entities it is a current practice to present information to external parties isolated from the available internal corporate management data, resulting in a lack of transparency and penalizing the financial statement users (information asymmetry). The answer to this issue was the introduction of the IFRS 7 Financial Instruments: Disclosure, an accounting standard with the main goal to improve the quality of disclosed information regarding financial instruments, compulsory for all annual reports from 1\(^{st}\) January 2007 onwards.\(^6\) Considering the currently far-reaching consequences of the subprime crisis on the U.S. mortgage market, one cannot help but think if such a crisis would have been preventable, or at least would have been realized earlier, if disclosure obligations like the ones of IFRS 7 would had been in place already.\(^7\)

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\(^3\) Franke, Hax (2005) p. 613
1.2 Problem discussion

From 1st of January 2005, onwards IAS/IFRS was introduced as new mandatory accounting regulation for all public listed companies in EU. The standards therefore replaced the previous Swedish GAAP for listed companies. The purpose of the substitution of the national GAAPs and the adoption of IAS/IFRS by the EU is to improve the quality of financial reporting, and increase the level of transparency and international comparability. This process of conversion was naturally connected with some difficulties. The most discussed standard within this new regulation was the treatment of financial instruments, IAS 39.

Financial instrument has become more complex over the past 20 years since the development of new innovations, such as interest rate swaps, treasury bonds and options, has increased. Those instruments have been developed in order to meet new risk management concepts (hedging). As a result of this, a need for more relevant and transparent information about the entities’ risks arising from financial instrument and how the correlating risks are managed has increased.

Since the nature of those financial instruments is often highly complex and constantly changing, an effective financial presentation of the certain risks is vital for the users’, and especially the investors’, understanding of financial reports for their decision-making processes. This is of special importance when it comes to hedge accounting and an understanding of the companies’ risk management policies, and how hedging affects the entities’ financial performances and risk situations (impact on profit and loss).

However, to perform hedge accounting is a voluntary decision of the companies. The benefit from applying hedge accounting is that the reporting of the hedged items and the hedging instruments (derivates) supports the qualitative characteristics of the IASB’s conceptual framework, resulting in the presentation of a fairer view of the companies’ economic and financial positions by improving the level of transparency. It became obvious that the disclosure requirements in the previous IAS 30 “Disclosures in the financial statements of banks and similar institutions” and IAS 32 “Financial instruments”. Disclosures were not keeping up with the rapid development within the area of risk management. Therefore a need arose to revise and improve the disclosure regulation regarding risks resulting from FIs. IFRS 7 is the actual result of that approach, meaning it is also applicable for Swedish Large Cap entities.

1.3 Research questions

The presented background and problem discussion led us to the following research questions whereas the first question serves as a main research field, whereas the second research question can be considered as a supplement to complete the chosen area of research.

- To which extent does the information provided in the annual reports 2007 of Swedish Large Cap entities correlate with the hedge accounting disclosure requirements of IFRS 7?

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8 Grafer & Sorgenfrei (2007) p. 10
9 Alexander et al. (2007) p. 48
11 Pirchegger (2006) p. 115
12 Scott & Yeoh (2006) p. 38
13 Gornik-Tomaszewski (2006) p. 43
How do financial analysts perceive the hedge accounting disclosures in accordance to IFRS 7, provided in the entities’ annual reports for their decision making purposes?

1.4 Purpose

The purpose of this thesis is to explore how Swedish Large Cap entities have disclosed information regarding hedge accounting in their annual reports 2007, after the implementation of IFRS 7. Furthermore this thesis evaluates how the new hedge accounting disclosure requirements are perceived by the financial analysts.

1.5 Delimitations

The research is limited to non-financial entities listed at the Large Cap list at OMX Nordic Exchange in Stockholm and at those entities that used hedge accounting in their annual reports of 2007. The purpose is not to investigate how the companies use hedges, nor the quality of the disclosed information. Also, the thesis will only focus on that part which is presented in IFRS 7 regarding hedge accounting. Thus, other parts concerning financial information disclosures in IFRS 7 will not be discussed any further. Moreover, the thesis will not focus on the producers’ perspective of financial statements when analyzing the usefulness of the new hedge accounting disclosures. The thesis focuses only on the user perspective since the investors (financial analysts) is referred as the primary user of financial reports according to IASB.

1.6 Disposition
2 Theoretical framework

This chapter explains the theoretical framework which is used as a primary tool to analyze the empirical findings. The theoretical framework also helps the reader to understand the subject and contribute to answer the thesis’s research questions and purpose.

2.1 IASB’s conceptual framework and qualitative characteristics

To make it easier for the producers when preparing financial statements and to facilitate users when interpreting financial statements, IASB has created a Framework for the Preparation and Presentation of Financial Statements. The document describes the basics by which financial statements are prepared and serve as a guideline in those accountings issues that are not directly covered in the international accountings standards, IAS/IFRSs. However, in case of a conflict between the standard and the conceptual framework, the specific standard is prioritized.\textsuperscript{14} The EU has also adopted the Framework in their regulation which means that Swedish entities that are following IFRS have to use the Framework as a guideline.\textsuperscript{15} Even if the Framework addresses all users of accounting information (paragraph 6), paragraph 10 explicitly states that investors serve as the primary and most important user-group. Since investors provide risk capital to the companies, the Framework argues that “…the provisions of financial statements that meet their needs will also meet most of the needs of other users that financial statements can satisfy.”\textsuperscript{16} The developed IAS/IFRSs are in line with the Framework’s perspective and primarily serve the needs of investors. Financial statements prepared under IAS/IFRS therefore preferential serve an information/accountability function and can be perceived as generating general purpose financial statements.\textsuperscript{17}

The IASB’s Framework is extensive and the most relevant parts for the purpose of this thesis are those paragraphs concerning the qualitative characteristics of financial statements. Qualitative characteristics are the aspects which make the information provided in financial statements useful to the users. The Framework presents four main characteristics. First, it is essentially that information provided in the financial statements is understandable by users with an adequate knowledge of business and economics. Information about complex matters should be provided because of its relevance, even if it could be too difficult for certain users to understand. Second, information included in financial statements should also be relevant for the decisions-making purposes of the users. Information is relevant when it gives aid to the users to evaluate the economic impact of past, present and future events.\textsuperscript{18}

Third, information should also be reliable. Information is considered as fulfilling this criterion when it is free from material error and bias, and when the users could reasonably expect that the information reflects what it is expected to represent.\textsuperscript{19} There is a conflict between relevance and reliability, therefore this has to be balanced in accounting and financial reporting. For investors, financial reports are considered as being relevant when they reflect all material transactions in a way that is close to reality, e.g. by using fair value on assets and liabilities. However, the calculation of fair value is in certain cases difficult and subjective, which can lower the reliability of the presented information. IASB’s general view is that fair value should be the underlying notion on those assets and liabilities that can be

\textsuperscript{15} Marton, Falkmann, Lumsden, Pettersson & Rimmel (2008)
\textsuperscript{16} IASB Framework for the Preparation and Presentation of Financial Statements (2003) paragraph 10
\textsuperscript{17} Gräfer & Sorgenfrei (2004) p. 4
\textsuperscript{18} IASB Framework for the Preparation and Presentation of Financial Statements (2003) paragraph 24-30
\textsuperscript{19} IASB Framework for the Preparation and Presentation of Financial Statements (2003) paragraph 31-38
measured on in a reliable way, e.g. financial instruments, commodities or investment property.\textsuperscript{20}

The forth and last qualitative characteristic is that it should be possible to \textit{compare} financial statements of an entity over time and with other entities’ financial statements, in order to identify the developments of financial figures and performance.\textsuperscript{21} A standardization of accounting regulations is necessary for the possibility of making such comparisons since a standardized regulation reduces numbers of options for entities by using different methods or policies. Hence, a well developed and harmonized regulation will make the comparison between companies out of different jurisdictions easier, and lowers investors’ transaction costs, which creates a more efficient market.\textsuperscript{22}

It is not clear, which qualitative characteristics are the most important ones for investors in their decision-making purposes. An investigation done by \textit{Ernst & Young}\textsuperscript{23} has shown that a majority of investors has identified \textit{transparency} as the most important aspect in the initial stage when considering an investment. The investigation defines transparency as the investors’ need for \textit{relevant} information in the communication with external shareholders, in order to indentify economic risks.\textsuperscript{24} Furthermore, the EU argues that a high degree of transparency and comparability of financial statements are the most important aspects for a well-functioning capital market in Europe.\textsuperscript{25}

2.2 Information asymmetry

The following section of the theory deals with the traditional and fundamental information problem which copes with the dilemma of unequally distributed information within the corporation and the market. The chosen theories dealing with this issue are the information problem (asymmetry), agency problem, the lemon problem, the cost of capital, voluntary disclosures and the usefulness of financial statements. The theories suit the purpose of the thesis, because they discuss the issue in a broad and flexible context, which is of special importance since we realized that specific research regarding hedge accounting disclosures is currently almost non-existent.

2.2.1 Information problem

If one party in a contractual relationship has more information than the counter-party, naturally an information issue arises, due to the unequally distributed information. Such unequally distributed information between the two parties is called information asymmetry. This phenomenon is often discussed by using the model of the agency-problem, which is explained in the following paragraph. Also the presented theory regarding the lemon problem (presented below), demonstrates this problem in an additional context.\textsuperscript{26}

2.2.2 Agency problem

According to \textit{Rimmel} “

\textit{the agency theory examines the efficient organization of cooperative relationships between two or more individuals}”\textsuperscript{27}. Furthermore, Jensen and Meckling defines

\footnotesize
\textsuperscript{20} Marton et al. (2008)
\textsuperscript{21} IASB Framework for the Preparation and Presentation of Financial Statements (2003) paragraph 39–42
\textsuperscript{22} Marton et al. (2008)
\textsuperscript{23} For this survey, 137 institutional investors in 16 different countries were interviewed in 2005.
\textsuperscript{26} Rimmel (2003)
\textsuperscript{27} Rimmel (2003)
the agency relationship as a contractual relationship where one or more individual (the principal) hires another (the agent) to execute a service on the behalf of the principal. The agent therefore acts sovereign but on account of a third party.\textsuperscript{28} But this delegation of decision-making authority is an issue, because the agent often does not have the same incentives as the principal. If this principal-agent dilemma is transferred to corporations, the agent (management) possesses unique information about the corporation’s business decisions, which is not available to the principal (e.g. shareholders) which creates information asymmetry.\textsuperscript{29}

The agent model assumes that all individuals act in their own self-interest. The principals are presumed to be risk neutral and reducing their risk through spreading their wealth in many different companies. At the same time, the agents cannot diversify away this risk and are assumed to be risk adverse. Hence, the agent has more at stake than the principal because he or she has financial wealth tied up in the company; therefore his or her wealth is depending upon the performance of the corporation solely. In addition, the agency theory assumes that management attempts to maximize its own welfare rather than the welfare of the whole corporation.\textsuperscript{30} Differences in objectives between the agent and the principal will result in a conflict of interests. The principal wants the managers to act in the best interest of the owners. The principal’s personal objectives may interfere with the agent’s if the agent chooses to maximize the personal earnings, which might have a negative impact on the principal.\textsuperscript{31}

Legal requirements like company acts, accounting regulation or corporate governance guidelines can help to minimize the information asymmetry between agents and principals. Such a framework of supportive financial reporting requirements is able to increase the level of transparency (an important accountability criteria, according to the mentioned survey of Ernst & Young) because they lead to additional disclosures which would not always been provided by the agents voluntarily.\textsuperscript{32} However, in their article, Healy and Palepu showed that the solely fulfillment of the financial requirements for annual reports are not enough to provide sufficient reports to the principals.\textsuperscript{33} The provision of additional, voluntary disclosures which improve the agents’ credibility regarding their financial reporting can be a solution to this issue. Such (voluntary) disclosures (will be discussed in chapter 2.2.5) are a way to reduce the impact of the agency problem since agents might be requested to articulate the corporation’s long term strategy, or use nonfinancial information that can be used to evaluate the effectiveness of such a strategy.\textsuperscript{34}

### 2.2.3 The lemon problem

Another prevalent discussed example for the information problem (asymmetry) is the so-called lemon problem. According to Rimmel, “the lemons problem arises from information differences and conflicting incentives between managers and investors”\textsuperscript{35}. The lemon problem refers to the used-car market in order to clarify the underlying issues of unequally distributed information. In a used car market, the buyers often cannot differentiate the good cars from the lemons (i.e. the ones with technical problems). Therefore the same model will sell for the same price, regardless whether they are “lemons” or not. This is due to the fact

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\textsuperscript{28} Jensen & Meckling (1976) p. 308
\textsuperscript{29} Rimmel (2003)
\textsuperscript{30} Rimmel (2003)
\textsuperscript{31} Rimmel (2003)
\textsuperscript{32} Schöttler, Spulak & Baur (2003) p. 20
\textsuperscript{33} Healy & Palepu (1993)
\textsuperscript{34} Rimmel (2003)
\textsuperscript{35} Rimmel (2003)
that the seller has much more information about the quality of the cars than the buyer (information asymmetry). If the buyer cannot distinguish between good cars and lemons, they will settle that issue by just offering a compromise price. The risk of buying a lemon will lower the price the buyers are willing to pay for any car. For the seller of a faultless car that price will be too low, so those sellers will stay out of the market. Thus, the information asymmetry drives the overall quality of used cars on offer down, since mainly just those sellers will remain in the market, which sell faulty cars. Consequently, if the lemon problem is not fully solved, and if the problem is related to the capital market, it will undervalue good ideas and overvalue bad ideas relative to the information available. This means that such an information asymmetry ultimately increases the cost of capital since the providers of capital compensate their lack of information by requesting a premium for their resources (discussed in detail in chapter 2.2.6).\textsuperscript{36}

A solution to the lemon problem is the design of optimal contracts between agents and principals, which provide incentives for full disclosure of private information, allowing a higher level of transparency. Since the lemon problem is another example of the information problem resulting in an information asymmetry, (legal) regulation\textsuperscript{37}, like the by the EU adopted IAS/IFRS that require managers to fully disclose “private” (internal) information in financial statements is perceived as a solution to this issue.\textsuperscript{38}

\subsection{2.2.4 Usefulness of financial statements}

When financial statements are prepared, they rely to a great extent on accounting information, which reflects and measures the economic consequences of the entity’s activities within a certain time period.\textsuperscript{39} Based on a pure statutory perspective, financial statements serve determination, documentation and information/accountability functions.\textsuperscript{40} According to Alexander et al “accounting is about the provision of figures to people about their resources”. But this provision of information cannot be limited to a simple delivery-process of text and figures. It is essential that accounting information is communicated, not just delivered.\textsuperscript{41}

According to the IASB’s and FASB’s Conceptual Frameworks, relevance in connection with reliability and the other qualitative characteristics (mentioned above) determine the usefulness of accounting information and the resulting financial statements.\textsuperscript{42} Mensah, Nguyen and Prattipati argue that those financial statements which are prepared in accordance with the Conceptual Framework and the suitable accounting standards\textsuperscript{43} usually result in high quality financial statements.\textsuperscript{44} This is of special importance, since such financial statements (and especially their disclosure) can be perceived as suitable tools to reduce information asymmetries (i.e. the agent- and the lemon problem) and to lower the costs of capital (chapter 2.2.6) for the companies providing them.\textsuperscript{45}

\textsuperscript{36} Rimmel (2003)
\textsuperscript{37} Schöttler, Spulak & Baur (2003) p. 20
\textsuperscript{38} Rimmel (2003)
\textsuperscript{39} Soffer & Soffer (2003) p. 4
\textsuperscript{40} Gräfer & Sorgenfrei (2004) p. 2
\textsuperscript{41} Alexander et al (2007) p. 3-10
\textsuperscript{42} Maines & Walsten (2006) p. 401
\textsuperscript{43} Pankoff & Virgil (1970)
\textsuperscript{44} Mensah, Nguyen & Prattipati (2006) p. 48
\textsuperscript{45} Schöttler, Spulak & Baur (2003) p. 22
2.2.5 Usefulness of voluntary disclosures

A study by Lang and Lundholm documented that better disclosure practice improve analysts’ forecasts of next year’s earnings. In addition, Banghog and Plenborg examined that a higher level of voluntary disclosure reduces the information gap (asymmetry) between companies and investors. The result of their study shows that “voluntary disclosure seems to reduce the level of information asymmetry". Voluntary disclosure can be defined as information which is provided over and above existing regulation. It is often argued that companies that provide voluntary disclosures to investors and analysts will find it advantageous. If a firm does not provide such information, the investors could become suspicious about the quality of their investment and discount its quality to the point where managers always are better off with a full disclosure practice. On the other hand, the provision of too much information may result in a loss of competitive advantage and disproportional disclosure costs.

Eccles and Mavrinac conducted a national survey between corporate managers, financial analysts, and portfolio managers to examine disclosure regulations and how they communicate with the capital market. The analysis indicated that all three groups think that the market functioning is imperfect. They do not “see a need for increased financial reporting regulation". On the other hand, the analysis suggests that companies can improve the quality of disclosure and communication by “developing a strategy for corporate information disclosure, upgrading the role of the investor relations staff and voluntary reporting of nonfinancial information”. These improvements would lead to an increasing level of management’s credibility and a better understanding of the entity’s business by the financial analysts, which would ultimately result in an increasing or less biased share price.

Lang and Lundholm examined the relations between the disclosure practices of firms, the number of analysts following a firm and the effects this has on the analysts’ earnings forecasts. They provided evidence that “firm’s with more informative disclosure policies have a larger analyst following, more accurate analyst earnings forecasts, less dispersion among individual analyst forecasts and less volatility in forecast revisions”. Lang and Lundholm observed that “potential benefits of disclosure are increased investor following, reduced estimation risk and reduced information asymmetry, every of which have been shown to reduce a corporations cost of capital in theoretical research”.

2.2.6 Disclosure, cost of capital for equity and market efficiency

It has been discussed above that the disclosed information in financial reports lowers the information asymmetry and therefore decreases the company’s cost of capital for equity. Cost of capital can be defined as the opportunity cost of an investment; that is how much a company has to pay to obtain capital from investors or creditors. The cost of capital for equity is basically the return that the investors demand for investing in the company. It corresponds to what the market or investor demands for bearing the risk of the ownership or owning the asset. In general, different tracks have been developed in accounting research regarding the correlation between disclosures and cost of capital. One track argues that

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46 Adrem (1999)
47 Lang & Lundholm (1996)
48 Verrecchia (1983)
49 Lang & Lundholm (1996)
50 Eccles & Mavrinac (1995)
51 Eccles & Mavrinac (1995)
52 Lang & Lundholm (1996)
53 Daske (2006)
54 Soffer & Soffer (2003) p. 31-33
“higher information quality reduces an entity’s cost of capital by lowering non-diversifiable estimation risk”.\textsuperscript{55} This is due to the fact that investors, when they construct their optimal portfolio\textsuperscript{56}, are not just only exposed to a systematic risk. In addition, they also face an estimation risk since investors have to estimate different factors from the available information that might affect the stock’s return. By providing additional qualitative information, the estimation risk will be lowered which tends to attract risk-averse investors.\textsuperscript{57} However, another research track argues that “improved disclosures lead to a greater liquidity of the stock and raises demand from large investors which decreases an entity’s cost of capital”.\textsuperscript{58} This is explained by the existing information asymmetry among the various investors and research has shown that an increased and higher quality of disclosures reduces the information asymmetry among investors and thereby stimulates the liquidity of the share, which ultimately lowers the cost of capital for the entity.\textsuperscript{59}

However, how financial information disclosures affect the market efficiency has for long time been discussed in financial theory. The classic underlying notion is that the more well-informed the whole market is; the stronger is the market efficiency.\textsuperscript{60}

2.2.7 Overview of the information problem

The following figure describes how the authors perceive the connections between the discussed theories regarding the information problem. After reading this theory chapter, the reader should grasp that the agency problem and the lemon problem are basically two ways to describe an information asymmetry. Two ways to minimize this asymmetry is to use high quality financial statements and voluntary disclosures, which consequently can lower the cost of capital due to a more efficient market.

![Overview of the theories regarding the information problem](image)

Figure 1 : Overview of the theories regarding the information problem (self provided model).

2.3 Hedge accounting

In the second part of this chapter, theoretical concepts regarding hedging and hedge accounting will be discussed. First, a brief introduction of hedging is presented. Second, an overview of the subject of hedge accounting is provided. This is done in order to provide the

\textsuperscript{55} Daske (2006), p. 333
\textsuperscript{56} An optimal portfolio consists of investments that fit the investor’s personal risk awareness. According to this individual risk an investor must decide how to diversify his investments in order to meet the perfect risk structure (Franke & Hax, 2003).
\textsuperscript{57} Clarkson, Guedes & Thompson (1996)
\textsuperscript{59} Diamond and Verrecchia (1991)
\textsuperscript{60} Grossman & Stiglitz (1980)
reader with a solid theoretical basis regarding hedging, which is helpful for a deeper understanding of the standards’ accounting requirements (IAS 39 & IFRS 7) and the conducted research.

2.3.1 Why use hedges?

Today, firms face several financial risks in their daily business activities due to international trading and transactions. One way to cope with those kinds of risks is to use hedging which is a cost-effective solution to lower the total risk in the entity’s business system.\(^{61}\) However, the cost of implementing such hedges affects the company’s decision for the use of hedging and is a reason why not all risks and transactions are hedged. Traditional arguments to motivate hedging are managerial risk aversion, reduction of expected costs for financial activities, tax reasons and benefit from capital market imperfections.\(^{62}\)

Basically, there are three different kinds of risks that companies are exposed to: currency-, interest-, and price-risks.\(^{63}\) Those risks can be hedged by the usage of derivatives. Derivatives are kinds of financial instruments whose changes in market value are depending on changes in underlying variables (asset and/or liabilities). Common examples of underlying variables are interest rates, exchange rates, stock prices, stock-market indices, or prices of commodities. A derivative instrument is basically a contract, consisting of minimum two parties. For instance, one of the participants buys the right to buy or sell the underlying asset in the future while the other party is usually obliged to fulfill the contract in the future. Derivatives can in general be divided into three major groups; forward contracts, swaps, and options. The common denominator is that they all are regulated at a future date.\(^{64}\)

Simplified, hedging is applied to minimize the risks borne in certain business transactions and/or balance sheet items. The desired effect of a hedging relationship is that the changes in value of the hedging instrument (derivate) and the hedged item (e.g. fixed-interest bearing loan) compensate each other. This can be exemplified by a company with a fixed-interest bearing loan, as the figure below indicates. Since the value of a fixed-interest bearing loan changes with fluctuations on the interest rate market, the company is exposed to fluctuations in the interest level. An increase of the interest rate creates a profit (due to the value of the loan decreases) and vice versa. In order to protect them against this interest rate risk, the entity could acquire an interest-rate swap since it generates a loss when the interest rate increases and a profit when the interest rate decreases. Due to the character of an interest-rate swap, the exchange of interest payments compensates the risk exposures.\(^{65}\)

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61 Wramsby & Östlund (2004)
63 Currency risk (also known as foreign exchange risk) arises from fluctuations in exchange rates between currencies; Interest rate risk arises due to the variability of interest rates which lead to a change in an asset’s or liability’s value; Price risk refers to uncertainties of current and future market prices of certain resources, e.g. commodities (Wramsby & Östlund, 2004).
64 Marton et al. (2008)
65 Marton et al. (2008)
2.3.2 Why use hedge accounting?

IFRS as well as US-GAAP contain certain regulations regarding how to account for hedging activities. Simplified, hedge accounting deals with the accounting treatment of two or more contracts (financial instruments), described in the paragraph above, that are assigned to be associated with each other in order to mitigate a certain economic risk. The intention of hedge accounting is to report the opposite developments of the hedged item and the hedging instrument in a way that the gains of one item compensate the losses of the other item. This basically means that hedge accounting regulation ensures that an offsetting gain or loss (e.g. changes in fair value or cash flow) from a hedging instrument affects the firm’s profit and loss account in the same period as the gain or loss from the hedged item.

The need for specific hedge accounting regulation arises from the “mixed model” which IAS 39 is based on. Accounts an entity according to the “normal” rules of IAS 39, the following constellation would be possible: while the hedged item of a hedging relationship is carried at amortized cost, is the associated hedge instrument (derivate) strictly recognized at fair value. From a pure economic perspective, the entity would not face a gain or loss at all, since the opposite performances of the hedged item and the hedging instrument would compensate each other. However, the accounting, according to the normal rules of IAS 39, would lead to an asymmetric reporting: just the changes in fair value of the hedging instrument would be recognized in profit and loss; but not the changes in value of the hedged item (carried at amortised cost). In such a constellation, the economic risk of loss would have been compensated successfully; however the financial risk of a possible decline of the entity’s profit situation would exist further on and could affect the financial reports. Inferentially, the use of hedging according to the mixed model would result in a mismatch of timing in the entity’s gain and loss recognition.

Therefore the particular hedge accounting regulation of IAS 39 can be perceived as a special case, correcting the described mismatch by changing the timing of recognition of changes in

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66 Pirchegger (2006) p. 115
68 Pirchegger (2006) p. 115
value of the hedged item and the hedging instrument to the same period. The possibility of carrying the hedged item at fair value, instead of amortized cost, and compensate its changes by the corresponding fair value changes of the hedging instrument is called the fair value option. This leads to a significantly lower volatility in the entity’s income statement (see figure 3).\(^{71}\)

However, due to the way hedge accounting rules are designed by the standard setter, their use can be perceived as an option rather than an obligation.\(^ {72}\) Therefore one can assume that companies are expected to have a strong incentive to apply hedge accounting, wherefore it is not mandatory regulated by the standard. Trombley, for example, states that “companies that engage in hedge activities would like very much to be allowed to use hedge accounting...”\(^ {73}\).

This perspective is based on the assumption that hedge accounting generates superior information to the financial statement users (besides the reduction of volatile effects on the entity’s income statement) and thus benefits the company by reducing an information asymmetry and resulting in lower costs of capital.\(^ {74}\) However, Melumad et al and Barnes exposed in their studies that eminent costs can be associated with hedge accounting and therefore lead to significant distortions from optimal hedges, which can affect the entity’s incentive to use hedge accounting and therefore the usage not categorical decreases the entity’s cost of capital.\(^ {75}\)

### 2.4 How to account for hedging (IAS 39 and IFRS 7)

In accordance with IAS 39 hedge accounting recognizes the offsetting effects on profit or loss of changes in the fair values of the hedging instrument and the hedged item.\(^ {76}\) Since hedge accounting can be perceived as an expectation to the usual rules for financial instruments, the usage is connected with the fulfillment of strict criteria. The entity’s management has the obligation to identify, document and test the effectiveness of the particular transactions for which hedge accounting is applied. The standard states specific requirements that have to be met in IAS 39.88, presented in the figure below.\(^ {77}\)

![Figure 4: IAS 39 hedge accounting requirements (self-provided figure).]

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72 Pichegger (2006) p. 115

73 Trombley (2003) p. 33

74 Trombley (2003) p. 33


76 IAS 39 paragraph 85

2.4.1 Hedged item

Hedge accounting can just be applied to hedged items that qualify for this special accounting treatment. By definition, a hedged item must generate a risk-exposure, which could affect the entity’s income statement at present or in future periods. According to the theory, common types of risks that are hedged include interest-rate risk, commodity-price risk, credit risk and foreign currency risk. Basically every asset or liability, which generates an exposure to risk, can be hedged.\(^{78}\) However, the standard states two exceptions: first, financial instruments classified as held-to-maturity cannot be hedged against interest-rate risk and second, investments in associates (consolidated or measured by using the equity method) are permitted to be a hedged item in a fair value hedge.\(^{79}\) According to PwC, common hedged items are:\(^{80}\)

a) Monetary items in a foreign currency (risk of changes in a foreign exchange rate);
b) Fixed-interest dept financial instruments classified as available for sale (risk of changes in interest rates or credit risk);
c) Highly supposable forecast sale/purchase in a foreign currency; and

d) Originated loans (interest-rate risk)

2.4.2 Hedging instruments

In most cases, only external derivates qualify for a use as a hedging instrument. But even if the standard usually requires a one-to-one designation of hedge item and hedge instrument, a single external derivate with multiple elements (e.g. a cross-currency interest rate swap) can be used to hedge more than one type of risk (in such a case the interest rate and foreign currency risk). However, the different risk types have to be clearly identifiable and it must be possible to calculate the effectiveness of each hedge relationship reliably.\(^{81}\) The range of tradable, external derivates has increased tremendously over the last decades, since business has become more globally and naturally comes along with different types of risks, compared to previous periods. Nowadays, common external derivates used as hedge instruments are stock options, future contracts for interest, currency or noble metal, interest-/ currency swaps, and credit default swaps to mention a few.\(^{82}\)

2.4.3 Hedge relationships

In general, IAS 39 distinguishes between three types of hedging relationships: fair value hedge, cash flow hedge and hedge of a net investment in a foreign operation.\(^{83}\) All of the following explanations about how to account for various hedge types apply just for those hedge relationships that are perceived as being effective (range of 80 to 125% over the hedge’s lifetime). All ineffective hedge relationships are recognized in an entity’s income statement directly as income or expenses.\(^{84}\)

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\(^{82}\) Dawson (2007) p. 59-60

\(^{83}\) IAS 39 paragraph 86

2.4.4  Fair value hedge (FVH)

The essence of a fair value hedge is that it hedges changes in fair value of assets, liabilities or unrecognized firm commitments (attributed to certain risks), which will affect the entity’s income statement. Such changes in fair value might arise as a result from changes in interest rates (e.g. for loans with a fixed rate), foreign exchange rates or fluctuations in commodity prices, for example. The effect on the entity’s income statement can be immediate or happen in the future. For instance, a loan borrowed in a foreign currency that is translated at the closing date and would affect the entity’s income statement immediately.  

When a fair value hedge is applied, the hedged item (e.g. an asset or a liability measured at cost) is adjusted for changes in fair value, according to the assignable risk, and these changes are recognized in the income statement. The oppositional arranged hedge instrument (derivate) is measured at fair value and its changes in fair value are recognized in the income statement in the same period as well. By doing so, the already mentioned reduction of volatility in the firm’s income statement is achieved.

2.4.5  Cash flow hedges (CFH)

A cash flow hedge’s object is to hedge the potential volatility of future cash flows (related to certain risks which can be assigned to assets, liabilities or highly possible future transactions), which will affect the firm’s income statement. For example, future interest payments or the reception of future debt-payments, based on a floating interest rate, can be perceived as typical future cash flows. Furthermore, future cash flows can also be assigned with future transactions like forecast purchases or sales in a foreign currency, or the foreign currency risk related to an unrecognized firm commitment. Determinates that have an impact on the volatility of future cash flows are changes in exchange and/or interest rates and changes in commodity prices. It is noticeable that the mentioned determinates have an essential impact on many hedged items, affecting their fair values and/or future cash flows. Therefore many fair value hedges can as well be designated as cash flow hedges. However, in order to qualify as cash flow hedges they must contain a variability exposure in future cash flows, as a result of the hedged items.

In comparison to fair value hedges, changes in the hedging instrument’s fair value are recognized in the hedging reserve, a balance sheet line item of the entity’s equity, to the extent the hedge is effective. This equity portion will be “recycled” to profit & loss when the actual hedged transaction affects the firm’s income statement. By doing so, the hedge relationship achieves its compensative effect. The function of an interest-rate swap, mention above in section 2.3.1, which converts a loan with a variable interest rate to a fixed-rate interest loan, can be perceived as a rudimentary example of a cash flow hedge.

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83 IAS 39 paragraph 88c
2.4.6 Hedge of a net investment in a foreign operations (HIFO)

Out of an accounting perspective, this hedge type is very similar to a cash flow hedge\textsuperscript{93}, and is accounted for in a similar way.\textsuperscript{94} Especially for internationally operating corporations, which have subsidiaries in different jurisdictions using different currencies, this hedge type might be attractive. When the consolidated accounts are prepared, the exchange differences are deferred into equity until the subsidiaries are liquidated. When a subsidiary finally is disposed, this portion of the equity has to be recognized in the entity’s income statement as a part of the gain or loss of the liquidation of the subsidiary. The fair value changes of the hedging instrument (derivate), assumed it is effective, are also recognized in entity’s equity until the disposal of the subsidiary. This matching generates the compensatory effect of the hedge relationship. In order to be effective, the net investment hedge will almost always be denominated in the subsidiaries’ local currency.\textsuperscript{95}

2.4.7 Hedge accounting disclosures in accordance with IFRS 7

As mentioned in the introduction chapter, from 2007 onwards IFRS 7 replaces the old standards IAS 30 and 32 regarding disclosure requirements for financial instruments. The general outcome of the full application of IFRS 7 is to present information to the users about an entity’s financial risk exposures and how those risks are managed by the entity. This will aid the investors by the provision of information regarding the impact FIs have on profit or loss and how the entity manages the risk involved in financial activities.\textsuperscript{96}

The criteria regarding hedge accounting disclosures in IFRS 7 are provided in paragraph 22-24. Each hedge type (described above) has different requirements which are presented in figure 5. As the figure shows, a description of each and its hedging instrument, measured in fair value, has to be disclosed. Furthermore, the disclosure requirements for cash flow hedges are the most extensive ones and differ most from previous standards. IFRS 7 has expanded the requirements concerning the gain or loss on the hedging instrument which is transferred from equity to the income statement. In addition, it has to be disclosed which line-item in income statement is affected.\textsuperscript{97} Also the requirements of providing disclosed information regarding the ineffectiveness of CFHs and HIFOs in the income statement are new in IFRS 7. A further new requirement is that entities, which use fair value hedges, need to report the gains or losses on the hedging instrument and hedging item attributable to the certain hedge.\textsuperscript{98}

The ultimate outcome with the disclosures requirements for hedge accounting is to clarify for the users what kinds of risks are involved in an entity’s hedging activities. The objective is also to provide a better description regarding what kind of FIs has been used as hedging instruments and the fair value of them.\textsuperscript{99}

Real life examples supporting the discussed IFRS 7 requirements are provided in the empirical findings of this research. We believe these examples can help the reader to get a better understanding of the standard’s requirements by offering insights into disclosure practices of the analyzed Swedish Large Cap entities.

\textsuperscript{93} Alexander et al (2007) p. 405
\textsuperscript{94} IAS 39 paragraph 102
\textsuperscript{96} Balans (2008) p. 41-42
\textsuperscript{99} Balans (2008) p. 41-42
Since neither the standard’s basis of conclusion or further theories regarding the certain paragraphs dealing with hedge accounting were available, the conducted interview with Jenny Andersson from KPMG Stockholm (presented in the following method and empirical findings chapter) served as an analysis-foundation in the analysis part of the thesis.

Figure 5: IFRS 7 Hedge accounting disclosure requirements (self-provided figure).
3 Method

In this chapter of the thesis the scientific views and choices of methods are presented. The chapter starts with an introduction to the applied method and a presentation of the research strategies that are used in the thesis. Subsequently it is shown how the data was collected and how the research’s underlying sample size is defined and analyzed. The chapter is concluded by a discussion regarding the reliability, validity and weaknesses of the chosen methodology.

In order to answer the purpose and research questions we have chosen to follow Saunders, Lewis & Thornills’ ideas of how to conduct a research process. The process consists of different steps where the researcher chooses between various approaches in order to perform a qualitative/quantitative investigation. By applying a model like this, it will be easier to structure and analyze the collected data more methodical.\(^\text{100}\) A structured process will help us to avoid pitfalls that can arise during our research and will systematically raise the probability of making a qualitative thesis.

3.1 Research strategy

When performing research the collection of information can be proceed in two different ways. The collection can be done with a qualitative or quantitative method, or a combination of these. The chosen method shall be based on the research project’s problem discussion and purpose, and the kind of theories that are used.\(^\text{101}\) A quantitative study tries to answer the question of how many times something has happened meanwhile a qualitative study focuses on why something has happened.\(^\text{102}\) Our chosen research method can be perceived as a quantitative approach combined with a qualitative approach. This is chosen because we wanted to investigate to which extent Swedish Large Cap entities follow the new hedge accounting requirements of IFRS 7 and how the financial analysts perceive this information. The combination of these two methods will provide us with a deeper understanding of the subject and, according to Holme & Solvang, this combination could be beneficial in order to recognize essential coherences.\(^\text{103}\) Furthermore the application of a qualitative approach will also allow us a better understanding of the subject which is important due to the complexity of hedge accounting. By knowing why information regarding hedge accounting is disclosed and what the users’ opinions are, a combined method will provide the thesis with a more complete and understandable portrait concerning the subject.

Our research strategy is based on a combination of exploratory and descriptive studies. An exploratory study is trying to find out what is happening and to gain new insights. According to Robson it can be described as an approach “to assess’ phenomena in a new light”.\(^\text{104}\) Descriptive research can be described as an attempt to portray actual events, situations and coherences. The purpose of that strategy is to investigate how things are and how things have been, without making any own judgments.\(^\text{105}\) The descriptive approach focused on the analyzed annual reports and helps us to understand how the disclosures regarding hedge accounting are presented currently. An advantage of applying this descriptive approach is that our preliminary understanding was regularly complemented by additional insights and led us finally to a deeper understanding of the issue with hedge accounting disclosures. For

\(^{100}\) Saunders, Lewis & Thornill (2003)
\(^{101}\) Trost (2005)
\(^{102}\) Saunders et al. (2003)
\(^{103}\) Holme & Solvang (1997)
\(^{104}\) Robson (2002) p. 59
\(^{105}\) Saunders et al. (2003) p. 97
example, when we tested how to analyze the annual reports we realized that is was not always that clear where the information regarding hedge accounting was disclosed. This was useful to bear in mind when we analyzed the annual reports and lead to a more efficient collection of secondary data.

The reason why the exploratory approach was chosen as well, was because we wanted to clarify our understanding of the problem since we were aware of the complexity of hedge accounting and its accounting treatment. Especially for our collection of primary data, the exploratory approach was beneficial since it is considered as a very flexible research method, which is adaptable to changing circumstances. The conducted interviews provided us with additional insights into the disclosure issues of hedge accounting and helped us to gain different viewpoints of the topic. For example, after the conducted interview with the accounting specialist we interpreted the actually wording of some standard requirements out of a different perspective (for instance, how to interpret “the nature of risk being hedged” in paragraph 7.22 c), IFRS 7).

### 3.2 Collection of data

Collected data can both be in form of primary- and secondary data. In general, data that has been collected for another purpose than the explicit research and still provides reanalyzing abilities is known as secondary data, for example, written materials such as journal articles, books or essays. Primary data is information that has been collected specifically (first-hand) in order to serve a research purpose, for example the conduction of interviews or questionnaires. However, even if secondary data can provide useful information to answer a research question, it is advantageous to combine it with primary information sources to support the informational value of the founded secondary data.

![Figure 6: The performed research process (self-provided model).](image)

As the figure above indicates, the research conducted in this thesis was based on primary- and secondary data, mainly because we already early in the prearrangement-process realized the importance of analyzing the problem regarding hedge accounting in a broader context. A focus only on secondary data would probably not direct the thesis into a desirable direction. Last year, 2007, was the first fiscal-year that IFRS 7 was used in financial reporting and consequently would existing sources regarding on how the standard effect the users be non-existent. Therefore, primary data gained in interviews with financial analysts and an accounting specialist, will also be presented in the empirical findings in order to successfully

106 Saunders et al. (2003) p. 188
107 Lundahl & Skärvad (1999)
answer the second research question. However, the vast majority of the empirical findings are based on secondary data, which is logically since the main purpose of this thesis is to identify how information regarding hedge accounting is disclosed. The secondary data is based on information collected in annual reports and answers the first research question. Collecting primary data for this purpose is almost impossible and is therefore not an option in our case. In general, the collection of the primary- and secondary data was performed simultaneously, except the interview with the accounting specialist, which was performed after the disclosure study. Because of that, the practical insights we gained complemented each other beneficially. The following headlines provide the reader with an overview how the collection of primary- and secondary data was preceded.

3.2.1 Secondary data of empirical findings

In order to fulfill the purpose of the thesis and to answer the first research question it is necessary to do a sample selection of the population, since very often it is impracticable and useless to survey an entire population. We have chosen to use a non-probability, also called judgmental\(^\text{108}\), sampling of our population which basically consists of all companies that are publically listed in Sweden, OMX Nordic Exchange in Stockholm. All publically listed companies, on group level, within Sweden (EU) have to follow the standards of the IASB which have been implemented into EU legislation by the EU Commission. Even if it would be interesting to investigate the annual reports of all companies listed on the OMX Nordic Exchange in Stockholm, such an extensive analysis has not been performed mainly due to a lack of resources (e.g. time constrains). Consequently, we were constrained to some kind of non-probability selection of our population. We do not believe that this will affect our study essentially, since many researchers argue that the use of sampling increases the possibility of higher overall accuracy than the use of full population. It still may be possible to generalize from non-probability about the population, but not on statistical basis.\(^\text{109}\)

Our first selection-criterion was those entities that are listed on the Large Cap list on OMX Nordic Exchange in Stockholm. The Large Cap consists of those Swedish companies that have the highest market capitalization (over 1 billion Euro).\(^\text{110}\) We have chosen that list because we believed that it was more likely that those companies reported their hedging activities in their financial statements, compared to companies with a lower market capitalization due to their higher level of accounting expertise and international business operations. Our sample group consisted of the 67 entities\(^\text{111}\) of the Swedish Large Cap list on 08.04.2008 (see appendix 3). Moreover, since the research focuses on listed non-financial institutions, which reported hedge accounting in their annual reports 2007, the sample size was limited to 48 entities, excluding the list’s financial institutions. However, non-financial institutions still represent the majority of the Swedish Large Cap list. Financial institutions were excluded from the sample size for several reasons. First, financial institutions have to fulfill additional and sometimes complex regulation (e.g. Basel II and special local requirements by Finansinspektionen). Second, the extent and complexity of financial institutions’ transactions differ essentially from business transactions of regular/non-financial organizations. Finally, the application of IFRS 7 was new to those companies whereas financial institutions already applied the requirements of this standard. OMX Nordic Exchange’s industry-classification was used in order to differentiate between financial and non-financial entities.

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\(^{108}\) Saunders et al. (2003) p. 151
\(^{109}\) Saunders et al. (2003) p. 152
\(^{110}\) Market capitalisation is calculated through multiply the entities number of share with its price.
Furthermore, since hedge accounting according to IAS 39 is voluntary, not all entities included in the sample size reported their hedging activities. Therefore the research is limited to those companies which applied hedge accounting in the fiscal year 2007. Due to that, seven companies had to be excluded from the initial sample size of 48 entities. In order to perform this assessment we set a deadline (25th April 2008) for the acceptance of annual reports for the year 2007. In addition, three companies had to be excluded since they were following US GAAP or Canadian GAAP instead of IAS/IFRS. Additionally one company was disqualified since they had a broken fiscal year and consequently had not implemented IFRS 7. All this resulted in a final sample size of 37 companies. A company became part of the sample size when their state within its annual report, of the fiscal year 2007, explicitly that hedge accounting is applied. The evaluation process whether an entity used hedge accounting or not was not difficult since it was in general clearly stated if hedge accounting in accordance to IAS 39 was applied. The evaluated annual reports were collected electronically from the companies’ websites.

3.2.2 Primary data of empirical findings

To meet the purpose of this paper, we conducted in total three interviews with professionals out of the accounting and investment profession. The accounting-specific interview was performed with Jenny Andersson from KPMG Stockholm, whereas two financial sell-side analysts at different broker firms were interviewed in order to cover the investor-specific perspective and to answer research question number two. Since the analysts requested anonymity, their names and places of work are not presented in the thesis.

This sample was chosen because we found it reasonable to interview professional users of financial statements in order to gain a better understanding of the issues connected with the disclosure of hedge accounting. Moreover, a purpose of this paper is to evaluate how the new hedge accounting disclosure requirements are perceived by financial analysts. Due to that, the chosen interview partners seemed to be suitable to answer this question because of their professional expertise and experience. The companies covered by the two financial analysts are Alfa Laval, ABB, Atlas Copco, Husqvarna, Linab, Nobia, Sandvik, SKF and Trelleborg.

The interview with the accounting specialist from KPMG helped us to identify the underlying issues of the standard and gave us useful practical insights about how the standard is applied by entities and which particular paragraphs are critical, both for investors and the entities itself. This interview was of great importance for the thesis since it was hard to find any extensive information regarding IFRS 7 and hedge accounting disclosure. Because of that, the interview with Jenny Andersson also served as a source for analysis purposes (research question one). In addition, the interview was helpful to gain knowledge about her opinion how disclosures are perceived by investors for decision making purposes (research question two).

KPMG Stockholm was contacted via e-mail together with the residual Big Four in the auditing industry. The KPMG office in Stockholm was the first that responded to our request and provided us a contact with an appropriate accounting specialist in financial instruments. The fact that only KPMG responded, and we decided to just have one interview with an interviewee out of the accounting industry, is not affecting our research since the interview only served as a basis for a better understanding of the subject and as a source for analysis purposes.

In order to get in contact with financial analysts of the chosen sample size, we accessed their e-mail addresses from the companies’ investors’ relations websites. Not all companies of the
sample size provided information regarding which financial analysts are following them permanently. Therefore we were not able to get access to the complete list of analysts evaluating the companies of our sample size. Due to that 86 analysts were contacted via e-mail. Six of those e-mails were non-deliverable, whereas 16 responded to our request. This resulted in two interviews and 14 rejections. The two main reasons for the rejections were either that hedge accounting was not important for the analysts’ evaluations at all, or individual time constraints due to the unfavorable timing of our interview request, since the companies’ Q1 2008 reports have been released simultaneously. We believe that the fact that we limit our primary research to two interviews with financial analysts is not affecting our research, since the main focus of this thesis lays on the analysis of the companies’ disclosed information. Naturally, a more extensive number of interviews would have provided us with more information and additional perspectives. But since the two interviews mainly complemented our research and gave us an insight into the usefulness of the disclosed information regarding hedge accounting, we believe that our decision to conduct two interviews is appropriate.

3.2.3 Collection of theories

Secondary data was used in the collection of the theoretical framework in order to provide a better understanding of the subject and to clarify what issues to investigate in. Literature sources will help the researchers to develop a good understanding and to gain insight into previous research.\textsuperscript{112} Thus, initially we studied the IFRS 7 and its Basis for conclusion (even though the particular Basis for conclusion is not available for the hedge accounting section of the standard) in detail plus the course literature from previous courses in accounting, to grasp the concept of hedge accounting and disclosures. IASB’s Conceptual Framework was also studied to understand the underlying notion of international accounting. Information was moreover collected from the big auditing firms’ homepages to receive a current view of the subject. However, as mentioned earlier, we realized early in the process that the existence of previous research was minimal and due to this the literature search was focused on general theories that could serve as useful tools when analyzing our empirical findings. A brief clarification regarding the importance of the chosen theories can be found in the theory chapter of this thesis.

Like mentioned before, several secondary data sources have been used in order to increase the credibility of the thesis such as books, scientific articles and other printed reports. Those search engines that we have used are GUNDA, the library catalogue, Blackwell Synergy, Science Direct and Business Source Premier. A selection of keywords used when searching were hedge accounting, IFRS 7 disclosure, hedges and information asymmetry among others. Finally, all information regarding accounting regulation and standards were collected from EU’s homepage for internal market/accounting\textsuperscript{113}.

3.3 Evaluation of collected data

Virtually all research will result in some numerical or qualitative data that has to be structured in a proper way in order to analyze it systematically.\textsuperscript{114} Since this thesis consists of both secondary, quantitative, data collected from annual reports and primary, qualitative, data collected from interviews, the following paragraphs will therefore describe how the analysis of the data was conducted.

\textsuperscript{112} Saunders et al. (2003) p. 50
\textsuperscript{114} Saunders et al. (2003) p. 327


3.3.1 Secondary data of empirical findings

For the purpose of the analysis of the annual reports, three different matrixes were designed to evaluate to which extent Swedish Large Cap annual reports 2007 correlate with the hedge accounting requirements of IFRS 7. This evaluation process was used to answer the first research question. In order to prevent an unsystematic evaluation process and to assure that annual reports are evaluated in the same way, we used Deloitte’s *IFRS Presentation and Disclosure Checklist 2007* as a starting point to develop our case specific matrixes. The checklist was downloaded from Deloitte’s IFRS website\(^{115}\). This checklist was chosen due to the fact that it represents a systematical and practically tested auditing tool, which provided us with sureness that all hedge accounting disclosure requirements have been checked in our analysis of the annual reports. The checklist was furthermore compared with the hedge accounting part of IFRS 7 (paragraphs 22 – 24). We realized that the standard’s requirements were identical with the checklist’s criterion.

Since IFRS 7 instructs different requirements for the three different hedge types\(^{116}\), we decided to develop one matrix for each hedge type. After analyzing the standard and the disclosure checklist we realized that there are no constant universal requirements for hedge accounting in general but specific requirements for each hedge type. For instance, “*an entity shall disclose the following separately for each type of hedge described in IAS 39*...”\(^{117}\), can be perceived exemplarily. In addition the usage of hedge type specific matrixes helped us to analyze the disclosed companies’ information out of a specific perspective for each hedge type. This was helpful to make sure that disclosed information regarding hedge accounting was tested against all individual requirements of the three different hedge types. An evaluation matrix identical with the standard’s requirements (paragraph by paragraph) was not useful since some paragraphs apply for more than one hedge type. Therefore a classification into three type specific matrixes (considering the relevant paragraphs, e.g. fair value hedges tested against paragraphs 22 a), 24 a), etc.) was more applicable and fits more coherent presentation purposes.

The secondary data is presented in the empirical findings chapter according to the three different matrixes we used in the evaluation purposes. The matrixes tested the requirements in a binominal way, meaning that the outcome of each evaluation resulted in the criterion “fulfilled” (1) or “not fulfilled” (0). The different matrix-criteria for the three different hedge types are presented below. Since the first research question of this thesis is to assess if the sample size’s companies fulfill the IFRS 7 requirements regarding hedge accounting, such a binominal evaluation seemed to be an appropriate way to answer this questions, since the results of such a study are simply to measure. The research results show to which extent, in percentage, the companies disclosures are correlating with the hedge-type specific requirements in the three different matrixes. Furthermore, the research will provide the reader of the thesis with an individual and detailed listing about the extent to which the certain Swedish Large Cap companies’ disclosures correlate with the hedge accounting requirements of IFRS 7. The calculation is done by using the following formula, where \(d_i\) is disclosed item, which is 1 if the item is disclosed, and otherwise 0; \(m_j\) is the maximum number of items and \(n_j\) is total number of companies that are supposed to fulfill the standards requirements.


\(^{116}\) See the theory chapter 2.4.7

\(^{117}\) IFRS 7 paragraph 22
How to interpret the matrixes

For instance, with Matrix 1 we analyzed if a sample size company fulfilled the disclosure requirements regarding fair value hedges (FVH). If a certain company followed the fair value hedge criterion of IFRS 7, it resulted in a company-specific score. Met criteria resulted in a 1, otherwise a 0. This scoring model was applied to all matrices. As Figure 3 indicates, Matrix 1 dealt with the disclosure requirements regarding fair value hedges; whereas Matrix 2 and 3 were used to evaluate the disclosure of cash flow hedges (CFH) respectively hedges of net investment in foreign operations (HIFO).

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry</th>
<th>Use of FVH</th>
<th>7.22 a)</th>
<th>7.22 b)</th>
<th>7.22 c)</th>
<th>7.24 a) i</th>
<th>7.24 a) ii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfa Laval</td>
<td>Industrials</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ASSA ABLOY</td>
<td>Industrials</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Atlas Copco</td>
<td>Industrials</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Total:  
Maximum:  
Percentage:  

7.22 a): a description of hedge type.  
7.22 b): hedging instrument and their fair value at the reporting date.  
7.22 c): the nature of risks being hedge.  
7.24 a) i): gains or losses on the hedging instrument.  
7.24 a) ii): gains or losses on the hedge item attributable to the hedged risk.

Table 1: FVH disclosure-evaluation form (self-provided model).

To exemplify how the evaluation process was conducted the presented matrix above shows the first three entities of our sample size (in alphabetical order). A complete list of the sample size as well as a complete presentation of all evaluation sheets (Matrix 1-3) can be found in the appendix.

The usefulness of the matrixes

Before we started to analyze the annual reports we were aware of the fact that annual reports often are very extensive and consist of numerous of pages. This naturally influenced the way how the annual reports were analyzed. Due to that, we were forced to carefully consider all chapters, paragraphs and notes in the annual reports. Information regarding hedge accounting was for instance presented in the administration report, in the comments on the income statement and balance sheet, or in the financial risks and policies chapter. However, in general disclosures regarding hedge accounting were provided within the extensive note-system and as a separate headline under accounting principles. Only few of the entities in the sample-size presented information regarding hedge accounting explicitly as a separate note.

Since the disclosure requirements for hedge accounting in IFRS 7 are detailed and specific, we have been relatively strict in our judgment if certain criteria is fulfilled or not. The complete list of our evaluation criteria can be found in appendix 5. In general, the three first
evaluation criteria in the Matrixes, common for all types of hedges (paragraph 22 in IFRS 7), did not create any issues in our evaluation of the annual reports. However, during the data-collection-process some minor factors arose which had to be considered in the evaluation. For evaluation criteria 7.24 a) i and 7.24 a) ii in Matrix 1 (Fair value hedge), some entities only provided information regarding the net gain or losses of fair value hedges. Those cases led to a “not fulfilled criteria”, since the standard explicitly require companies to present information regarding gains or losses both on the hedging instrument and the hedged item. For evaluation criteria 7.23 d) in Matrix 2 (Cash flow hedges), we rejected those entities that only presented information concerning the amount that was removed from equity and/or included in profit or loss for the period. This is due to the fact that IFRS 7 additionally requires information about the amount included in each line item in the income statement. The criteria regarding ineffectiveness recognized in profit or loss for cash flow hedges and for hedges in net investments in foreign operations (7.24 b) for CFH and 7.24 c) for HIFO), were also fulfilled in those cases where information was disclosed that no hedges were ineffective under the period. However, some entities only provided data on ineffectiveness on an aggregate level, i.e. CFH and HIFO included in the same line item. Those cases were not accepted and led to a “not fulfilled criterion” (0), since, according to the standard, ineffectiveness needs to be presented individually for each kind of hedge (CFH and HIFO).

3.3.2 Primary data of empirical findings

In order to answer the second research question of this thesis it was first necessary to gain the attitudes of professional users of financial statements, and second to evaluate their statements. The recovery of the financial analysts’ and the accounting specialist’s opinions was conducted with the help of qualitative interviews. In comparison to quantitative research methods, qualitative interviews focus not on representativeness but on the collection of typical and exemplary outcomes, so that issues, developments and practical experiences can be recognized.\textsuperscript{118} Due to that, the chosen data collection method matched with the purpose of our research question, since this study aims for exemplary user opinions rather than a representative pattern or general opinion.

In qualitative oriented interviews (characterized by its openness) the interviewee becomes a dialog partner or expert from whom one tries to experience as much as possible in an interactive communication.\textsuperscript{119} Because of its openness, qualitative interviews tend to lead to a data load which is often difficult to review.\textsuperscript{120} Therefore we chose a sort of a qualitative interview that is characterized by a higher structuring: the semi-structured interview.\textsuperscript{121} When applying this type of interview, the interviewer bases the conversation on a guideline, allowing the interviewee to talk free but at the same time assuring that the interviewer can keep track of the purpose of the conversation.\textsuperscript{122} For this thesis, the interview guidelines acted like a data-collecting framework, ensuring that the second research question was answered and the previously analyzed theories were tested against the practical opinions of the financial analysts. The used interview guidelines can be found in appendix no.1 and 2.

The primary data was collected in three telephone interviews with the interview partners mentioned above. All interviews were conducted in Swedish, since the interviewees have Swedish as their native language. For later analysis purposes the interviews were recorded

\textsuperscript{118} Gläser & Laudel (2004) p. 36
\textsuperscript{119} Kühn & Fankhauser (1996) p. 57
\textsuperscript{120} Helfferich (2004) p. 24
\textsuperscript{121} Hopp (2000) p. 177
\textsuperscript{122} Helfferich (2004) p. 24
plus notes were taken simultaneously. The records and notes were subsequently written down into complete text to get a sound overview about the interviewee’s opinion. The most relevant parts of the transcripts are presented in the empirical findings.

3.4 Reliability and validity

When conducting research, it is vital to reduce the possibility of getting the answer wrong. This means that two major aspects have to be taken into consideration when research is designed: reliability and validity. The first aspect reliability can be defined as the probability that data collection methods or analysis methods will lead to consistent findings, similar observations and conclusions, if the research would be conducted by other researchers.123 Since the collected data for this thesis consisted of both, primary and secondary data we had do make sure that the gathered information had a sound quality in order to result in a high level of reliability. The primary data consisted of information gained from interviews with financial statement users (analysts & accounting specialist). In order to support the criteria of reliability the interviewer has to be aware of the fact that his or her verbal communication could have an impact on how the respondent answers.124 To guarantee the usage of reliable primary data we were aware of our verbal communication and made sure that we were not leading the conversation into a certain direction. Also the interviews were recorded on tape and later noted down on paper in order to avoid posterior misinterpretations.

By basing our study partly on secondary data, we increased our level of reliability by nature. According to Saunders et al. data from large and well-known organizations (e.g. companies’ annual reports which are also audited before they are released) are likely to be reliable and trustworthy, in general.125 Since the disclosure-information we analyzed is regulated by accounting standards (IFRS 7), the researched data is reliable by law. However, annual reports usually are extensive and individually designed documents and therefore there is a possibility that the researcher misses some information. Hence, our research group consisted of three students we were able to at least double-check how the data was collected from the individual annual reports. This fact helped us to overcome the problem that important data was left out. Due to the fact that this thesis is mainly based on secondary data, we believe that other researchers would come up with the same or similar results/conclusions.

The second aspect validity can be defined as a level to which the collected data accuracy measures what it was intended to measure. It can also be perceived as the extent to which research findings are really about what they profess to be about.126 Validity for the used primary data in this paper depends on the extent to which the interviewer has access to the respondent’s knowledge and experience. Furthermore, it is also depending on the researcher’s ability to interpret the respondent’s answers and the used language and terminology. To guarantee a high level of validity it is important that the obtained information is flexible and responsive interactions are possible during the interview. This allows meanings to be probed and also that topics can be covered from different perspectives. Besides that, it will allow to address questions clearly and understandable to the respondents.127 To address this issue in the conducted research we sent out the background, problem discussion and a interview guideline to the interview partners in advance, to obtain data that matched our research question.

123 Saunders et al. (2003) p. 100-101
124 Healey & Rawlinson (1994) p. 138
125 Saunders et al. (2003) p. 206
126 Ryan, Scapens & Theobald (2003) p. 155
127 Saunders et al. (2003) p. 253
The validity for secondary data, annual reports, used in this thesis may be one of the most sensitive aspects. Often when secondary data is used it can lead to answers that do not match with the original questions. Unfortunately, there are no clear solutions to this dilemma. According to Saunders et al., a sound approach to overcome this problem is trying to evaluate the extent of the data’s validity and let the researchers make their own decisions. Since the thesis is about the impact of the recently introduced IFRS 7 we had to get a sound understanding of the IFRS 7 hedge accounting requirements and how hedge accounting is regulated in IAS 39. Finally, it is important for the reader to be aware of the fact that none of the authors of this thesis has English as a native language which could result in some minor comprehension issues. In addition to that, we are aware of the fact that interpretation issues could arise for the conducted telephone interviews since the conversations were translated from Swedish to English in order to present the findings to the reader.

### 3.5 Criticism of chosen method

Our chosen method consists of both primary data (collected qualitatively) and secondary data (collected quantitatively). Since for both collection approaches the chosen sample size was rather small and not representative, the research conclusions cannot be generalized. For instance, the research was limited to the largest non-financial institutions on the OMX Nordic Exchange in Stockholm as well as to financial analysts. Therefore the sample size does not represent a general market or all various stakeholders relying on financial statements. Furthermore, when data is collected primary through interviews there is a risk that misinterpretations occur. It cannot be fully guaranteed that the respondents are interpreted in the desired way. Due to the fact that the interviews have been conducted by telephone there is a risk that the judgments and evaluations done by the researchers are not complying with the actual opinions of the interviewees. According to Trost it is not appropriate to conduct a telephone interview if the purpose of the interview is to develop a deeper understanding regarding the respondents’ attitudes. In addition, it can be difficult to create an environment of personal trust which might sometimes be helpful to retrieve as much information as possible. Since the interviews are based on an interview guideline (semi-structured interviews), it is essential that the researchers design the guideline in a way that is coherent with the purpose of the research. In order to guarantee that, it is vital that the research’s underlying theories are interpreted in an appropriate way and critical issues are reflected in the interview guideline. An adequate design of the questions (matching with the theories and research questions) is therefore pivotal for the usefulness of the guideline.

Since the secondary data was collected through self-developed matrixes (based on IFRS 7, section hedge accounting) the evaluation tool can be considered as subjective. This could partly affect the research’s objectivity. Also that the disclosure requirements are tested in a binominal way can affect our study because that chosen method could miss to explain naturally reasons behind why some disclosures are left out. Furthermore, there is a risk that we have missed or interpreted some information regarding the companies’ hedge accounting in the wrong way, since the financial reports are extensive documents and we are not extremely experienced evaluators of financial reports. Finally, it is important to point out that the disclosure study does not evaluate the quality of the provided hedge accounting disclosures.

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128 Saunders et al. (2003) p. 205  
129 McDaniels & Gates (2005)  
130 Trost (2005)  
4 Empirical findings

In this chapter the thesis’s empirical findings are presented. First the collected secondary data from annual reports 2007 is presented. Furthermore, the most relevant information gathered from the interviews is provided in the second part of this chapter. The interview-guidelines used can be found in appendix, as well as the complete set of matrixes used for the collection of the presented findings.

4.1 Collected secondary data “Annual reports 2007”

This part of the empirical findings presents the results of research question one, which is: “To which extent does the information provided in the annual reports 2007 of Swedish Large Cap entities correlate with the hedge accounting disclosure requirements of IFRS 7?”. Since the collection of the secondary data was conducted by the help of the matrixes described in the method chapter, the findings are presented according to the three different (hedge type specific) matrixes. This means that first the findings regarding the fair value hedges are provided, followed by the presentations of cash flow hedges and hedges of net investment in foreign operations. As described in the method, the collection of the secondary data was conducted by an analysis of the sample size’s annual reports 2007.

The following figure illustrates the usage of hedge accounting for the different hedge types of the chosen Swedish Large Cap entities. As an introduction to this part of the empirical findings, it is helpful to get an overview about the fact for what kind of hedge types hedge accounting is applied for. This might aid the reader in a better understanding of the following presentation of the findings concerning the various hedge types, since not all hedge types are used by all entities. As the figure below demonstrates, out of 37 companies, almost 52 percent (19) of the sample size used hedge accounting for fair value hedges, whereas approximately 60 percent (22) used hedge accounting for hedges of net investment in foreign operations (called net investment hedge in the figure). The high score of 97 percent (36) indicates that cash flow hedges were by far the most popular hedge type. The only company that did not state information in their annual report 2007 regarding the usage of cash flow hedges was SSAB.

Figure 8: Overview of the sample size's usage of different hedge types.
4.1.1 Disclosures about fair value hedges (Matrix 1)

As stated above, 19 entities of the sample size used hedge accounting for fair value hedges in accordance to IAS 39 in their annual report 2007 and was thereby supposed to follow the disclosure requirements of hedge accounting in IFRS 7. Matrix 1 was used in order to collect the data from the annual reports for fair value hedges. This Matrix had five different criteria, each corresponding to the requirements in IFRS 7 for fair value hedges. The requirements can be found in the theory chapter 2.4.7.

The evaluation of the annual reports (figure 9) showed that the total sample size fulfilled the fair value hedge accounting requirements of IFRS 7 with approximately 87 percent. The group’s total score provided by the Matrix was an amount of 83 (the sum of all 1), whereas 95 was the maximum score the sample group could have achieved if every individual entity within the sample group would have fulfilled the disclosure requirements. Thus, the results in Matrix 1 indicated 12 deviations (95 minus 83) from the best possible score (which was 95), meaning that those requirements of the standard were not met even though fair value hedges were used by the companies.

![Figure 9: Sample group's FVH score](image)

Furthermore, the research regarding the disclosure of fair value hedges indicated that certain criteria of the standard were fulfilled differently. As the figure below (figure 10) demonstrates, paragraph 7.22 a) was met by even more than the 19 entities which were using fair value hedges. This is due to the fact that six companies\(^{132}\) presented a description of this hedge type even though they were not applying fair value hedging. Therefore this column naturally exceeds 100 percent and resulted in a score of 131.58 percent. Many entities used standard formulations close to IAS 39’s definition of this hedge type. Paragraphs 7.22 b) was met by all companies. The information regarding the fair value of the hedge instruments were regularly available in the notes of the balance sheet under financial instruments, for example. The nature of hedged risks, 7.22 c), was also often fulfilled by using common descriptions of currency, interest rate and/or raw material price risks. Many times those descriptions were unspecific and more of a general nature, meaning that the certain transactions which were supposed to be hedged were not described explicitly.

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\(^{132}\) Axis, Eniro, Hexagon, Husqvarna, Oriflame SDB & Volvo.
When it comes to paragraph 7.24 a) i and ii, gains and losses on the hedging instrument and the correlating hedge item are naturally highly related to each other. As figure 10 indicates, those criteria were not met by all analyzed entities. Whereas the gain/loss of the hedging instrument was disclosed by almost 74 percent (14 entities), the corresponding gain/loss on the hedged item was just published by approx. 63 percent (12 entities). The assessment of the fulfillment of those two paragraphs was critical since some entities either did not disclose any information about the gains/losses of their hedging relationships at all, or just the gains/losses for one side of the hedge relationship. Furthermore, some companies also presented the information regarding gains/losses just as a net result. Since IFRS 7 requires an explicit disclosure of gains/losses on both, hedge instrument as well as hedged item, an aggregated/net result of a hedge relationship therefore resulted in a score of 0. This can be exemplified by the two following screenshots from the annual reports of Ericsson and Scania, which should help the reader of this thesis to understand the basis of our judgment:

Ericsson’s disclosure serves as an example for companies which provided net results (no score point), whereas Scania’s note is an example of disclosed information which fulfilled the evaluation criteria and therefore received a score point. To conclude, the hedge accounting requirements of IFRS 7 regarding fair value hedges was mostly met, only the last two paragraphs resulted in a lower percentage of fulfillment.

4.1.2 Disclosures about cash flow hedges (Matrix 2)

All companies of the sample size, except one as stated above, disclosed information in their annual report 2007 that hedge accounting for cash flow hedges in accordance to IAS 39 was applied. Hence, 36 entities were supposed to follow the disclosure requirements for that specific hedge-type in IFRS 7. Matrix 2 was used in order to collect the information regarding cash flow hedges from the annual reports and this Matrix consisted of nine
different criteria, referring to the IFRS 7 requirements for cash flow hedges. The specific disclosure requirements for cash flow hedges can be found in the theory chapter 2.4.7.

As the figure below indicates, the evaluation of the annual reports points out that approximately 62 percent of the analyzed entities fulfilled the disclosure requirements in IFRS 7 for cash flow hedges. The outcome of Matrix 2 resulted in a total score of 202 (the sum of all 1). The maximum score the sample group could achieve was 324, if every individual company within the group would fulfill the disclosure requirements. Consequently, the deviations from the best possible score (which was 324) for this hedge type was 122 (324 minus 202), meaning that those criteria of Matrix 2 were not fulfilled, even though cash flow hedges were used by the entities.

![Sample group's CFH score](image)

**Figure 12: Sample group's CFH score.**

Moreover, if the deviations are analyzed in detail, the result of Matrix 2 shows that certain criteria of IFRS 7 were fulfilled differently. Just as for fair value hedges, the common specific requirements for all hedge types criteria 7.22 a-c), were fulfilled by almost all companies within the sample group, which figure 13 demonstrates. For the a) criterion, all entities except Hakon Invest provided a description of the hedge type (i.e. cash flow hedge) which naturally would result in a lower percentage than the maximum.

![CFH requirements met by the sample size](image)

**Figure 13: CFH requirements met by the sample size**

However, this is not the case since the only company (SSAB) that did not apply cash flow hedging presented a description of that hedge type. Thus, this column resulted in a score of
100 percent. Standard formulations close to IFRS 7’s definition for this hedge type were often used by the entities in the sample group. Furthermore, paragraph 7.22 b) was met by all companies except three\textsuperscript{133}, which did not disclose any information regarding which hedging instrument designated to hedge accounting and the fair value of those instruments. This resulted in a score of almost 92 percent and the information regarding the valuation of the cash flow hedge instrument were often available in the notes of the balance sheet under financial instruments. As the figure below shows, criterion 7.22 c), which explains the nature of the hedged risk, was fulfilled by almost all entities within the sample group. \textit{Hakon Invest} was the only annual report that did not fulfilled this criterion. Just as for the fair value hedge evaluation, this paragraph was often fulfilled by using common descriptions of currency, interest rate and/or raw material price risks.

The following paragraphs (7.23 a-e) are unique disclosures requirements for cash flow hedges. The first paragraph, 7.23 a), resulted in a score of approximately 64 percent, meaning that 23 entities out of 36 disclosed information regarding the periods when the cash flow are expected to occur and when they are expected to affect profit or loss. The findings concerning this paragraph are contrasting. Either the disclosed information was explicit and detailed like the example out of \textit{Sandvik}’s annual report demonstrates, or it was basically non-existent.

\begin{table}[h]
\centering
\begin{tabular}{lcccccccc}
\hline
\hline
US$ & 1,300 & 1,375 & & & & & & & \\
\hline
Total & 1,300 & 1,375 & & & & & & & \\
\hline
\end{tabular}
\caption{The interest rate swap agreements entered into had an estimated positive market value of SEK 196 M ($3) at year-end. Sandvik applies hedge accounting in accordance with IAS 39 to these interest rate swaps since they are directly related to specific loans.}
\end{table}

Figure 14: \textit{Sandvik}’s annual report 2007 (p 25), periods when the cash flows are expected to occur and when they are expected to affect profit or loss.

The next tested evaluation criterion resulted in an even lower result, as figure 13 demonstrates. Approximately 16 percent (6 entities) provided information in their annual report 2007 about any forecast transaction for which hedge accounting had previously been used, but which is no longer expected to occur. Of those annual reports that had a score for this criterion, different disclosed information could be found, which the following screenshots from the annual reports 2007 of \textit{SKF} and \textit{TeliaSonera} can exemplify:

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{example.png}
\caption{To the left, \textit{SKF}’s annual report 2007 (p 78); to the right \textit{TeliaSonera}’s annual report (p 76)

As figure 15 indicates, \textit{SKF} disclosed information that they had a transaction in 2006 for which hedge accounting was applied, but is which no longer expected to occur. At the same time \textit{TeliaSonera} disclosed information that no cash flow hedges were discontinued. Furthermore, criterion 7.23 c) was met by all 36 entities using cash flow hedges and the information regarding the amount recognized in equity was in all annual reports available in the consolidated statements of changes in equity. However, the following criterion for paragraph, 7.23 d) was only fulfilled by 17 of the analyzed annual reports which resulted in a

\textsuperscript{133} Hakon Invest, Hexagon & Holmen
score of almost 48 percent. As mention in the method chapter, the judgment of the fulfillment of this paragraph was critical since almost every entity provided information about the amount removed from equity and included in profit or loss for the period; but without including which line item in the income statement was affected. Since this is explicitly required by IFRS 7, this consequently resulted in a score of 0 for those entities which did not provide such information. For clarification purposes, the two following screenshots from the annual reports of *Axfood* and *Boliden* can serve as an example:

![Figure 16](image-url)

*Axfood’s* disclosure serves as an example for companies providing information of which income line item was affected (received a score point), meanwhile *Boliden’s* screenshot is an example of disclosed information which did not fulfill the evaluation criterion.

For criterion, 7.23 e), only two companies\(^{134}\) out of 36 provided information in their annual reports regarding the amount that was removed from equity and included in the initial cost or other carrying amount of non-financial asset or non-financial liability whose acquisitions or incurrence was hedged. As the figure 13 indicates, this resulted in a score of approximately six percent for this paragraph. The following screenshot from *SCA’s* annual report of 2007 can exemplify how this requirement can be disclosed:

![Figure 17](image-url)

Finally, the last criterion in Matrix 2 measures how the entities within the sample size disclosed information regarding the ineffectiveness recognized in the income statement for cash flow hedges. As the figure 13 shows, almost 42 percent of the annual reports (15 entities) disclosed information regarding this requirement, which consequently shows that 58 percent of the annual reports (21 entities) failed to fulfill this requirement. Since cash flow hedges and hedges of net investments in foreign operations are accounted for in a same way, two examples about findings concerning this paragraph can be found in figure 20 below. To sum up the findings regarding CFHs, it becomes obvious that the various criteria of the standard dealing with this hedge type were met very differently. Whereas the more general criteria of the paragraphs 7.22 a-c were fulfilled by most of the analyzed companies, the paragraphs requiring more detailed and explicit information (e.g. 7.23 b) and e)) were only met by the minority of the entities.

### 4.1.3 Disclosures about hedges of net investment in foreign operations (Matrix 3)

The analysis of the sample size’s annual reports 2007 identified that out of 37 entities only 22 used hedges of net investments in foreign operations (HIFO). In order to collect the research-

\(^{134}\) Ericsson & SCA
Empirical findings

data, Matrix 3 was used. This matrix tests the four hedge type specific requirements of IFRS 7 against the information disclosed by the analyzed entities. Like for the two matrices presented above, a complete description of these four criteria can be found in chapter 2.4.7 of this thesis. The analysis of the annual reports exhibited that the tested companies fulfill IFRS 7’s requirements with almost 81 percent. The sample size’s total score, provided by the Matrix, was 71 (the sum of all 1), whereas 88 is the maximum score the analyzed entities could achieve, if every individual entity within the sample group fulfills the disclosure requirements. Hence, the results in Matrix 3 indicate 17 deviations (88 minus 71) from the total score (which was 88), meaning that those requirements of the standard were not met even though hedges of net investment in foreign operations were used by the entities.

Figure 18: Sample group’s HIFO score (self-provided)

Moreover, the evaluation pointed out that some disclosure requirements of the standard regarding HIFOs were met variably. Similar to the fair value hedges discussed above, paragraph 7.22 a) was fulfilled by even more than the 22 companies, which applied HIFOs. This is due to the fact that three entities\(^{135}\) presented a description of this hedge type even though those companies were not using any hedges of net investments in foreign operations. Because of that, the particular column of figure 19 exceeded 100 percent, resulting in a score of 133,64 percent. It was noticeable that many analyzed entities used standard formulations, close to the definition of this hedge type in the standard. The requirements of paragraph 7.22 b) regarding the disclosure of the hedging instruments’ fair values was fulfilled by almost 91 percent. Precisely as for the other hedge types presented above, the fair value of the hedging instruments were usually findable in the notes referring to the balance sheet line item financial instruments. The nature of the risks being hedged by HIFOs,

Figure 19: HIFO requirements met by the sample size.

\(^{135}\) Getinge, Lundin Petroleum & Scania
Empirical findings

paragraph 7.22 c), were usually described in general terms, similar to the other two hedge types presented previously. Description in general terms means that usually just the functionality of HIFOs was explained, but no subsidiaries hedged with the help of HIFO-relationships were stated explicitly. This paragraph was met by all companies (100 percent) using hedges of net investments in foreign operations.

As figure 19 demonstrates, paragraph 7.24 c), dealing with the recognition of the ineffectiveness arising from HIFOs in the income statement, was only met by 31.82 percent (seven entities) of the analyzed companies. The fulfillment of this criterion was either achieved by stating an explicit number in the notes to the income statement in form of a table or by providing the information as written text within diverse sections of the annual reports, for example the financial risk management or the presentation of the entities’ financial instruments.

Figure 20: To the left SAS’s annual report 2007 (p 68); to the right Stora Enso’s annual report 2007 (p 184).

Figure 20 illustrates exemplarily two examples about how the information regarding the ineffectiveness of HIFOs was presented in the analyzed annual reports. Whereas SAS provides the information plainly in a table as a part of the notes to the income statement, Stora Enso disclosed the same content as written text within their notes referring to equity hedging (sub-headline: hedging of net investment in foreign operations). After reviewing the findings regarding HIFOs it became evident that most of the standard’s requirements were met, with an exception of paragraph 7.24 c), meaning that information referring to the ineffectiveness arising from hedges of net investments in foreign operations was not disclosed by the majority of the analyzed entities.

4.2 Collected primary data “Financial analysts interviews”

This part of the empirical serves as a source of data to answer the second research question of this thesis: “How do financial analysts perceive the hedge accounting disclosures in accordance to IFRS 7, provided in the entities’ annual reports for their decision making purposes?”. As stated in the method chapter, the primary data was collected by two telephone interviews with sell-side financial analysts working at two different Swedish broker firms. Both interview partners had worked four years in their profession. The two interview partners are named “Analyst A” and “Analyst B” in this section of the empirical findings.

4.2.1 General opinions about annual reports

In general, both interviewees perceived annual reports as useful analysis-tools for the evaluation of their companies. In addition, they both stated that the annual reports are of special use if a new company is included in the set of entities they are following. This is due

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136 Telephone interviews (29th April 2008)
to the fact that more basic information is needed in order to understand the company and its strategy/industry in a better way. For their analysis purposes the analysts mainly used the annual reports to get information of the companies’ cash flows and their income statements. Regarding the usage of the annual reports for analysis purposes, the perceptions of the two interviewed analysts differed. Analyst A evaluated the balance sheet in the annual reports more than the ones presented in the interim reports. For A the significance of the annual reports and especially its disclosures depended on the ability to understand how the different parts of the financial reports are connected and related to each other. Analyst A furthermore stated that a sound understanding of factors and transactions which led to the actual figures in the reports is necessary in order to assess the impact of the disclosed number and to understand the financial situation of the entity as a whole.

Analyst B believed that annual reports are of special usage when a deeper and more extensive analysis of an entity is conducted. However, B stated that the disclosures of annual reports are not that important for the analysis of entities on a daily basis. Anyhow, B mentioned that disclosure notes are particularly useful to clarify arisen ambiguities or if figures have changed fundamentally.

4.2.2 Hedge accounting and IFRS 7

Both analysts were aware of the fact that IAS/IFRS are applied for all listed Swedish companies. However, only analyst B knew that IFRS 7 was recently implemented, but admitted that he had no deeper knowledge of the standard. Analyst A could not really identify and separate individual standards and instead he perceived all IAS/IFRS standards in one broader context. Compared to previous years, both analysts had so far not observed any changes concerning the disclosed information, even though 2007 was the first year IFRS 7 was applied. Besides the new disclosure requirements, both analysts were aware of hedge accounting, stating that this phenomenon was nothing new to them, since the entities they were following already apply hedge accounting for a while.

In addition to that, both analysts stated that they neither focus very detailed on hedging activities nor the available hedge accounting information. This is due to the fact, that A and B believed that hedging and hedge accounting were not of special significance, since their entities just bind minor financial resources in those activities. Basically, the transactions were just not material enough for deeper analysis efforts. However, they both agreed that the purpose of hedge accounting is in general positive since it leads to a smoother result by evening out fluctuations in the entities’ income statement. Also they stated that the whole concept of hedging and hedge accounting is more vital for financial institutions since it affects the competitive advantages of those organizations.

For B it was more of interest what kind of hedges the entities he analyzes use, rather than they apply hedge accounting or not. However, he stated that if he had a company where the hedging activities and hedge accounting are of significance, he would read the standard’s requirements first and continue with an analysis of the disclosed information in the financial statements and the corresponding notes. Analyst A mentioned that hedge accounting is useful when it increases the transparency of important business transactions. For A it was vital that he could gather information which indicates what proportion of a figure is influenced by external factors like currency effects and which proportions refer to the business performance solely.
The question regarding the importance of the different hedge types (FVH, CFH and HIFO) was answered complete differently. Whereas B stated that the CFH are the most interesting hedges to evaluate (with the most evaluation significance), he was not able to specify the essence of this hedge type in detail. Analyst A admitted that he was not able to characterize any of the three hedge types regulated in the standards.

4.2.3 Hedge accounting disclosures

Since none of the interviewees had a deeper understanding of hedge accounting and the corresponding disclosure requirements of IFRS 7, the following discussion gathered from the interviews refers mainly to the usage of disclosures in general.

Both analysts stated that standardized information and formulations are usually provided in many disclosures. They argued that this kind of information is basically of no use. The analysts furthermore said that they are more interested in receiving quantitative information, for instance what kind of currency flows are expected to occur and which maturity dates hedging the contracts have, even though such information would not be of significance for their companies. Analyst A believed that the entities do not report all their numbers regarding their financial instruments in the financial reports and therefore a direct and personal contact with the entities’ CFOs is important for his analysis purposes. Analyst B agreed with A’s statements, confirming that an informal contact with the CFOs is often more important than the information which is publicly available (e.g. annual and interim reports). Analyst B generally believed that “substance over form” is important when disclosure requirements are implemented in order to enable the companies to account for their business transactions in a flexible and unique way (and to provide their particular disclosures). However, in the same context B mentioned that the comparison of financial information between different entities is of special importance. Besides that, A believed that sometimes the disclosed information in total is too extensive and unclear. He preferred plain, well structured tables instead of detailed descriptions in text.

To sum up, the two interview partners were basically satisfied with the information provided by the entities regarding their hedge accounting activities and believed that their efforts support a true and fair view of their financial and economic situation. However, the area of hedges and hedge accounting was not a significant and material issue for the entities the interviewees follow. Analyst B suggested to disclose information about how the figures in the I/S and B/S would look like if no hedge accounting would have been applied. The direct and often informal contact with the financial departments of the companies was perceived as extremely vital whereas the information available in the financial statements was assessed as an additional, useful analysis tool.

4.3 Collected primary data “Accounting specialist”

A telephone interview with Jenny Andersson from KPMG Stockholm was conducted in order to get a deeper understanding of the subject of hedge accounting and its disclosure requirements regulated in IFRS 7. The interviewee has several years of working experience in the accounting/auditing profession and is specialized on financial instruments and risk management.

137 Telephone interview (9th May 2008)
4.3.1 Hedge accounting and IFRS 7

According to Jenny Andersson the reason why IFRS 7 was implemented is that IASB’s objective was to have a disclosure standard, which is applicable for both kinds of entities, financial and non-financial institutions. She also stated that an additional reason for the introduction of IFRS 7 was to improve the previous regulation (IAS 30 and 32) since especially IAS 32 was difficult to interpret. In particular, she believed that there was a need to clarify the regulation and requirements regarding the disclosure of hedge accounting activities. However, she had the opinion that it is still difficult to grasp the effect hedge accounting has on the entities’ results and how the various accounting departments apply the hedge accounting rules. On the other hand she believed that the new standard could improve the quality of disclosed information regarding hedge accounting since more detailed requirements could have a pedagogical effect on the companies’ disclosure practices because they are nowadays required to explain their activities and transactions more in detail.

4.3.2 Hedge accounting disclosures and investors as main users of financial statements

From an investor’s point of view, she mentioned that one of the most critical aspects is to receive information regarding what unrealized value changes are reflected in the I/S and how the effect of hedge accounting is affecting the company’s equity, meaning that it is vital to understand what amount is transferred to equity and when it will be removed from it in future periods. Jenny Andersson did not believe that these new disclosure requirements were required from investors or financial analysts in particular. She rather believed that for this user group it is more important that they understand the already disclosed information and grasp the substance and the meaning of the figures. Furthermore, she stated that she did not believe that the voluntary choice of hedge accounting is necessarily leading to a better and deeper understanding of the entities. It would rather depend on the individual nature of the company’s business. From her experience, the impact of hedge accounting for many non-financial institutions is rather minimal. In fact, she stated that the economic hedges are often more important for analysis purposes since they could represent a bigger proportion of an entity’s hedging activities in total, compared to the ones hedge accounting is applied for. Since financial analysts do often not have an extensive accounting knowledge, she believed that those two concepts (economic hedges and hedge accounting) are often mixed up.

4.3.3 IFRS 7 and its explicit hedge accounting paragraphs

In general, she believed that the implementation of IFRS 7 can be considered as a learning process. It will take some time until the companies understand how to present and formulate the standard’s requirements in a way that it fits the needs of the statement users. Jenny Andersson stated that the auditing firms provided entities with support when it comes to the formulation of the disclosures but she personally believed that the disclosures have to be useful for the readers and has to provide them with aiding information. Just to include disclosures which do not tell the user anything is useless.

Regarding paragraph 7.22 she argued that it is crucial that the companies explain the function of the various hedge types in detail and that they provide extensive information concerning the hedged risks. For the hedged risks, she stated that it is important that not only the risks are mentioned but also that the certain components of the hedged risk are described

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138 An economic hedge is designated as a hedging activity for which no hedge accounting is applied for, e.g. the requirements of IAS 39, section hedge accounting, are not met. PwC (2008) http://www.pwc.com/Extweb/service.nsf/docid/1378D3155AA439D18025714D002F7838. Accessed 16.05.2008
explicitly. For instance, a hedged interest rate risk should be explained by providing information regarding what portion of the interest rate is actually hedged, the risk free portion or the risk portion.

Furthermore Jenny Anderson stated that in the discussions with her clients she realized that paragraph 7.23 is the most critical one within IFRS 7 regarding hedge accounting. Especially 7.23 a) is difficult to fulfill in practice since it is hard to interpret whether the future cash flows from the hedged item or the hedging instrument should be disclosed in detail. The standard is not very clear in that point. In addition, she said that 7.23 b) is also very seldom disclosed in financial reports since the presentation of forecast transactions for which hedge accounting has been previously used but which is no longer expected to occur basically means that the entities would admit that they have difficulties to predict their future cash flows. Naturally, the finance and accounting departments therefore tend to avoid such presentations. According to Jenny Andersson, particular 7.23 e) is a paragraph which is not often applied in practice, since only very few companies have very expensive machines/inventory purchases which are hedged.

For paragraph 7.24, she stated that especially a separate disclosure of the gains/losses of the hedged item and the hedging instrument is an important issue for analysis purposes. In practice, the provision of such figures should not be difficult for the entities. In her opinion, an ineffectiveness of the CFHs and HIFOs is not so common in practice and if companies fail to provide this kind of information it is most likely just due to slackness. The same circumstance applies for 7.23 d), dealing with the disclosure of the amount removed from equity (CFHs) and included in each line item of the I/S.
5 Analysis

In this chapter of the thesis the empirical findings are analyzed and interpreted together with the theories and models presented in the theory chapter. In order to facilitate the reader following the discussion, this part of the thesis is structured analog to the empirical findings presented above.

5.1 Secondary data “Annual reports 2007”

In this part of the analysis chapter the results of the empirical findings gathered from the secondary research is analyzed. Every matrix-result is discussed separately and compared with IFRS 7 requirements regarding hedge accounting disclosures and the feedback gained from the interview with the accounting specialist. The analysis of each hedge type starts with an analysis on an aggregate level analyzing the sample group’s score, followed by a discussion focusing on the more detailed findings of each of the three different hedge types and their partly specific requirements (FVH, CFH & HIFO).

Before the analysis concerning the various hedge types is presented, an analysis covering the general findings of the research is conducted. As chapter figure 8 indicates, 51.35 percent of the sample size’s entities used FVHs, whereas the majority of the analyzed companies applied CFHs (97.30 percent). The usage of HIFOs was identified for 59.46 percent of the tested Swedish Large Cap entities.

The conducted research demonstrated that the CFHs were by far the most popular hedge type, since besides one company all analyzed entities used such hedge relationships to minimize their business risks. This implies that the common usage of CFHs should actually increase the comparability between the tested Swedish Large Cap entities since all of them, which were using this hedge type were supposed to fulfill the standard’s requirements and could therefore be evaluated under same circumstances. However, the previous presented findings showed that some disclosure criteria were met differently (different matrix scores). Some of them were just presented by a minority, even though those firms in general applied this hedge type, which consequently reduces the level of comparability between the various companies. Since January 2007, IFRS 7 is a mandatory part of the EU adopted IAS/IFRS. Because of that, this first-time practical implementation can be considered as an initial step in an ongoing learning process, according to the interviewed accounting specialist Jenny Andersson from KPMG Stockholm. This early level of the implementation process should be kept in mind when the following correlations between the findings and the standard requirements are analyzed.

According to the theory, the purpose of using the concept of hedge accounting is to lower the volatility in the entities’ income statements. Since this is affecting an entities annual profit and paid dividends, information regarding such an effect can be considered as relevant. On the other hand, the mentioned issue that certain criteria were met very differently by the analyzed companies demonstrated that the disclosed information regarding hedging activities is currently lacking a high level of reliability and is not always supporting the IASB Conceptual Framework’s qualitative characteristic of understandability (e.g. the presentation of net results of hedging relationships instead of a clear split up between

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profit/loss of hedged item and hedging instrument). As introduced earlier, a more detailed analysis of the three hedge types is presented in the following chapters of this part of the thesis.

5.1.1 Disclosures about fair value hedges (Matrix 1)

On an aggregate level, the result of Matrix 1 (figure 9) demonstrated that the sample groups’ score regarding fair value hedges is close to 88 percent. This means that a majority of the empirical findings of Matrix 1 correlated with the IFRS 7 requirements regarding FVHs. An interesting finding was that some companies disclosed a description of this hedge type (resulting in a score of 131.58 percent) even though they were not applying fair value hedging. This fact is not harmonizing with Jenny Andersson’s perception of useful disclosure and common Swedish accounting policies, since just that information should be provided in annual reports which supports the users. Therefore, on the basis of her perception and personal experience as an accounting specialist, information regarding business transactions, policies or strategies which are not performed by the particular entity is of no use. One possible explanation for this could be that this standard requirement seems to be an easy obligation to fulfill if just the plain wording of the standard is considered. Therefore those companies could have decided to provide a complete description of all three hedge types even though they did not apply all of them in practice. This perspective is supported by the fact that most of the analyzed entities used standard formulations to describe their used hedge types (paragraph 7.22 a).

Also the description of the hedging instruments and their fair value at the reporting date was disclosed by all entities (paragraph 7.22 b)). This might be due to the fact that such information for FVH hedging instruments was just simply available for all entities and therefore presented by all of them. Even though that the accounting specialist of KPMG mentioned that it was crucial that the companies explained their hedged risks in detail, the results of Matrix 1 regarding the particular paragraph 7.22 c) showed that all companies met this criterion. However, it was a common practice to explain the risks exposures in a broader context, not incurring into certain transactions or business situations. This obvious gap between our findings and the perception of Jenny Andersson could be explained by the fact that we conducted this research in an initial stage of the implementation process of IFRS 7. Currently, a proven implementation practice (e.g. implementation guidance or comparison possibilities with competitors) is non-existent and therefore the pure wording of the standard is interpreted subjectively and might therefore not necessarily correlated with the standard setter’s original objective.

The disclosure concerning the gains/losses of hedged item and hedging instrument, paragraph 7.24 a) i and ii, was the most critical ones for this hedge type (figure 10). As figure 10 indicates, almost 74 percent of the companies provided this kind of information for their hedging instruments, whereas just 63 percent disclosed this information for their hedged items. The low score regarding this paragraph is striking, since according to Jenny Andersson such information is important for investors’ analysis purposes. In addition, she mentioned that the provision of figures serving these criteria usually is not a problem in practice. Because of that it is surprising that some companies provided just net results or incomplete information (no gains/losses or just for one side of the hedge relationship). The incomplete disclosures regarding those criteria could be due to the fact that the accounting departments consider this kind of information as non-relevant for the statement users. Furthermore, these
two criteria of IFRS 7 are new compared to the previous standards\textsuperscript{143}, which could explain the current deviations from the best possible score.

\subsection*{5.1.2 Disclosures about cash flow hedges (Matrix 2)}

After analyzing the results of Matrix 2 it is possible to state that on an aggregate level the sample group’s CFH score was just approx. 62.35 percent (figure 12). This clarifies that information of this hedge type was more difficult to disclose for the analyzed entities, compared to the other two hedge types. As the following discussion demonstrates, IFRS 7 requires the most extensive disclosures for this hedge type and consequently some results showed that the correlation between the empirical findings and the standard’s requirements is not always that high.\textsuperscript{144} As discussed in the theory chapter (chapter 2.4.7), the disclosure requirements for CFHs were the ones that differed most from previous regulation, which could serve as an explanation why certain scores were not that high, considering that the implementation process of new accounting standards can be perceived as ongoing learning process.

Like for FVHs (discussed above), the fact that all analyzed annual reports fulfilled the requirement to provide a description of the hedge type, paragraph 7.22 a), can be explained by the usage of standardized formulations. For CFH, the following two requirements, paragraph 7.22 b) and c), resulted in a lower correlation compared to the FVHs. However, those results differed just therefore from the FVH-findings because a few companies failed to provide this kind of information. Since the sample size for this hedge type was bigger, the results were still close to 100 percent, so it is possible to conclude that the correlation between the findings and the requirements of paragraph 7.22 in general is very high. The previous discussion regarding the three criteria of paragraph 7.22 (chapter 5.1.1, FVHs) is also applicable for CFHs.

The following discussion focuses on the paragraphs which are unique for cash flow hedges. As shown in figure 13, almost 36 percent failed to provide information regarding periods when cash flows are expected or occur and when they are expected to affect profit or loss (paragraph 7.23 a)). According to Jenny Andersson, this relatively high percentage of companies that did not meet this criterion could be due to the fact that the standard is not clear in this point whether the future cash flow from the hedged item or the hedged instrument (or even both) should be disclosed. This could be an explanation why some companies failed to disclose such information. For criterion 7.23 b) the percentage of firms providing the required information was only 16.37 percent. Basically, there could be two reasonable explanations for this relatively low score. First, the majority of the sample size did not have any forecast transactions for which hedge accounting previously had been used, but which are no longer expected to occur. If this would have been the case, the companies did not had to disclose any kind of information regarding such transactions because, according to Jenny Andersson, it is a common accounting practice to just disclose information which has actually affected the companies’ transactions and is therefore useful and relevant for the reader. However, as figure 15 demonstrates some firms like for example TeliaSonera disclosed information even though they had no discontinued cash flow hedges. Second explanation could be that paragraph 7.23 b) is problematic in practice since, according to the accounting specialist, a provision of such facts would basically mean that the entity would

\textsuperscript{143} Balans (2008) p. 41-42
\textsuperscript{144} Balans (2008) p. 41-42
have to admit that they have difficulties to predict their future cash flows. Therefore the accounting and finance departments usually tend to avoid such presentations.

The fact that the empirical findings concerning paragraph 7.23 c) correlated completely with the standard’s requirement could be due to the fact that this information is easily available in the consolidated financial statements (changes of equity). Since the recognition of value changes of the hedging instrument in the equity is basically the essence of a cash flow hedge\textsuperscript{145} (mention in the theory chapter), a report of this amount seemed quite logical. As figure 13 points out the following evaluation criterion, 7.23 d), resulted only in a score of 47.22 percent. The low correlation could be explained by the fact that this criterion had most changed\textsuperscript{146}, compared to previous regulation. In addition, Jenny Andersson stated that especially the requirement concerning the disclosure of the amount removed from equity and included in each line item of the income statement, was not always met in practice. She believed that this could be due to slackness. Another possibility could be that the analyzed companies just did not remove any amount from equity or that the removed amounts were in fact provided in the changes of equity but not explicitly stated in a particular note to the income.

The empirical findings regarding 7.23 e)\textsuperscript{147} also support Jenny Andersson’s view that this criterion is very seldom applied in practice and could therefore explain why the percentage of companies providing such particular information was only 5.56 percent. Paragraph 7.24 b), which requires a disclosure of the ineffectiveness from CFHs in the income statement was only fulfilled by approx. 46 percent of the analyzed annual reports. The most reasonable explanation for this might be that ineffectiveness of cash flow hedges is not so common in practice, according to Jenny Andersson. In addition to that, 7.24 b) is, compared to the previous regulation, a new requirement\textsuperscript{148} which could explain the low score if the implementation of IFRS 7 is considered as a learning process in an initial stage. On the other hand, Jenny Andersson argued that the ineffectiveness of a hedge relationship is not difficult to measure in practice, wherefore missing disclosures could also be due to slackness.

5.1.3 Disclosures about hedges of net investment in foreign operations (Matrix 3)

As Figure 18 highlights, the analyzed annual reports resulted in a total HIFO-score of almost 81 percent. Due to that, it becomes obvious that the correlation between the research findings and the standard’s requirement was quite high. Like for the already analyzed FVHs, paragraph 7.22 a) was fulfilled by almost 114 percent. This means that more entities disclosed a description of this hedge type even though they were not applying such hedging relationships. As mentioned above, the interviewed accounting expert from KPMG stated that such a disclosure practice is normally considered as non-relevant/non-useful and should therefore be avoided. A reason why companies nevertheless provided that kind of information might be due to the fact that this criterion does not require a complicated verbalization and is therefore often fulfilled by providing definitions of this hedge type close to the one presented in IAS 39. Like for the previous discussed CFHs, also for HIFOs a description of used hedging instruments and their fair value at the reporting date was not disclosed by all entities. This exception cannot be explained by the available theories or any

\textsuperscript{146} Balans (2008) p. 41-42  
\textsuperscript{147} An example for a hedged transaction where the amount removed from equity is included in the initial cost/carrying amount of a non-financial asset or liability can be the purchase of very expensive inventories or machines. (Empirical findings 4.3.3)  
\textsuperscript{148} Balans (2008) p. 41-42
interview feedback, although such information should not be difficult to provide since the necessary financial instruments must be recognized in the consolidated accounts. According to the theory, hedging instruments of HIFO relationships are almost always denominated in the subsidiaries local currency. Therefore the (fair) value of those instruments (e.g. loans and bonds) must already be existent in the corporation’s accounting system. Since paragraph 7.22 c) is of general nature (applies for all three hedge types), the analysis concerning this criterion is identical with the discussion mentioned above, in the analysis of fair value hedges.

The recognition of the ineffectiveness from HIFOs (paragraph 7.24 b)) was only disclosed by 31.82 percent of the sample size. The explanations for lacking information regarding the ineffectiveness of HIFOs could be identical with the ones provided in the analysis of the CFHs. This seems just reasonable since the accounting treatment for both hedge types is very similar, according to the presented theory.

5.2 Primary data “Interviews”

In this part of the analysis chapter the result of the empirical findings collected by the primary research is analyzed. This part starts with a general analysis regarding the respondents’ opinions about annual reports and disclosures, followed by a particular analysis regarding how the respondents perceive the information provided concerning hedge accounting and its disclosures. As mention earlier in the thesis, the primary data was mainly collected by two telephone interviews with financial analysts, which represents the investors’ perspective. Also, the interview with the accounting specialist, Jenny Andersson, is used in the analysis due to her sound insight about how investors use financial reporting. To make it easier for the reader to follow the analysis of the empirical findings, same sub-headlines are used in this part of the thesis as in the empirical finding chapter.

5.2.1 General opinions about annual reports

As stated in the empirical findings, both financial analyst A and B agreed upon that annual reports serve as a useful analysis-tool in the evaluations of their companies. This supports Pankoff & Virgil who believe that annual reports which represent a high quality are an important resource for investors’ decisions. However, even if IASB’s conceptual framework primary tries to serve the needs of the investors, the interview partners general argued that not all information provided in the annual reports is used in their work as analysts. For instance, they are more interested in information regarding the most fundamentals figures in the annual report, i.e. cash flow and income statement instead of detailed and extensive disclosures. For A was it vital that he understands the annual reports and its disclosures in order raise the significance of the provided information. This fact could be related to the importance of the Conceptual Frameworks qualitative characteristic of understandability for financial reporting. On the other hand, for A and B, disclosures are not that important for their work on a daily basis. However, they both mentioned that they use the disclosures if critical issues arise. Therefore is it possible to conclude that disclosed information is not that

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150 A differentiation of IFRS 7 hedge accounting disclosure requirements between general (apply for all three hedge type) and hedge type specific criteria can be found in the theory chapter 2.4.7.
151 Alexander et al. (2007) p. 405
152 Pankoff & Virgil (1970) p. 269
relevant\textsuperscript{155} for their analysis processes. This finding conflicts with Alexander et al\textsuperscript{156}, who argue that in today’s complex and globalized business world the provided figures must be explained in detail in order to raise the significance and understandability of the presented information. If this would apply in practice, the interviewed financial analysts should rely more on the entities’ information provided in their disclosures.

5.2.2 Hedge accounting and IFRS 7

According to the empirical findings presented above, it is possible to state that both interviewed analysts had not an extensive understanding of current accounting policies and the content of the various IAS/IFRSs. Only analyst B had a basic understanding of some accounting standards. He was also aware of the fact that IFRS 7 was introduced recently. This finding is corresponding with Jenny Andersson’s opinion that the hedge accounting disclosure requirements were not requested from investors and financial analysts in particular. On the other hand, the fact that both financial analysts do not really have a sound understanding of accounting regulation is conflicting with the presented theory about the usefulness of financial statements. According to the theory, financial statements rely to a great extent on accounting information\textsuperscript{157}. Due to the nature of financial statements, one could say that those statements are a reflection of accounting data. Therefore it is striking that those analysts who are working with financial statements, which basically serve an information/accountability function\textsuperscript{158}, lack a fundamental insight into the underlying accounting regulation. Another interesting fact was that none of the two interviewees had observed any changes concerning the hedge accounting disclosures of the companies they follow. This observation could harmonize with the empirical findings of our disclosure study showing that the rather new requirements of the standard (e.g. the specific criteria for CFHs) resulted in lower scores, compared to criteria which were already existent in previous regulation.

Both the financial analysts’ and Jenny Andersson’s opinion regarding the significance of hedging matched. They all believed that it is more vital to understand what kind of hedging activities (e.g. economic hedges) that are used instead of reviewing whether hedge accounting is applied or how it is implemented. Even though the companies decided to provide voluntary information regarding their hedging activities it is not appreciated by the two interviewed analysts, since they do not consider this data for their analysis purposes. Compared to the presented theory about voluntary disclosure\textsuperscript{159}, this would mean that such additional information is not used to reduce an existing information asymmetry, although this is supposed to be the objective of voluntary disclosure. According to Eccles & Mavrinac\textsuperscript{160}, there is a need for increased financial reporting regulation and a requirement for disclosures meeting a high level of quality. Due to the fact that the entities analyzed by A and B are non-financial institutions and do not bind large financial resources in their hedge accounting activities, they consider the provided information simply as non-relevant for their purposes. This was also the conception of Jenny Andersson, since she thinks that the concept of hedge accounting is more crucial for financial institution because it directly affects the disclosure of data concerning the core-business of those organizations and partly their competitive advantages. However, both financial analysts understood the concept of hedge accounting

\textsuperscript{155} IASB Framework for the Preparation and Presentation of Financial Statements (2003) paragraph 24-30
\textsuperscript{156} Alexander et al. (2007) p. 3-10
\textsuperscript{157} Soffer & Soffer (2003) p. 4
\textsuperscript{158} Gräfer & Sorgenfrei (2004) p. 2
\textsuperscript{159} Lang & Lundholm (1996)
\textsuperscript{160} Eccles & Mavrinac (1995)
and perceived it in general as a positive concept since it smooths the companies’ results in their income statement. This perception harmonizes with the essence of the hedge accounting concept presented in the theory chapter of this thesis161. Besides the fact that hedge activities and hedge accounting is not important for the companies they follow, analyst A in general perceived hedge accounting as a helpful concept if it is relevant for the analyzed companies and increases the transparency of the entities’ business transactions. This opinion correlates with Ernst & Young’s survey result162 and the EU’s perception of useful financial statements163 that transparency is the most vital criterion for the usefulness of provided financial information.

After reviewing the analysts’ statements it became obvious that the interviewees had difficulties to differentiate between the different characteristics of the three hedge types (FVHs, CFHs & HIFOs). This fact corresponds with Jenny Andersson’s perception that financial analysts often not have an extensive accounting knowledge. She believed that the concepts of economic hedges and hedge accounting are often mixed up. This could indicate that the disclosures regarding hedge accounting are not that important for analysis purposes for the most non-financial institutions.

5.2.3 Hedge accounting disclosures

In general, all three interview partners agreed that many disclosures in annual reports are designed in a standardized way, using formulations which are well-established and often unspecific. Besides that, the financial analysts highlighted their demand for quantitative rather than qualitative information. They argued that the provided disclosures often contain too much unspecified text or unclear information. Out of their perspective, plain and well structured sets of figures and tables are more desirable than descriptive information. An interesting finding is also that the analysts perceived the informal contacts to the CFOs of the companies they are analyzing as more important than the information gathered from the entities’ annual reports, especially in cases when ambiguities arise.

The result that A and B considered some of the voluntarily provided hedge accounting information as not helpful, due to the fact that they are just of an unspecific nature, is conflicting with the theory of voluntary disclosure. Since hedge accounting is a voluntary accounting policy (IAS 39) the resulting disclosure can be considered as voluntary as well. For instance, Adrem defines voluntary disclosures as information disclosed over and above existing regulations.164 In accordance with this theory, voluntary disclosure should minimize an existing information asymmetry by the provision of additional data165. The need for such additional information can be explained by the traditional principal-agent conflict166, dealing with the dilemma of unequally distributed information between a party in operating charge and another one providing the necessary resources. Like Banghog and Plenborg argue167, a higher level of voluntary disclosure tends to reduce the information asymmetry between companies and investors. However, the findings of the conducted research showed that this is not the case for the interviewed financial analysts. Since they both do not used the additionally provided data, the voluntary disclosure is not changing the status of a potential

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161 Chapter 2.3.2
164 Adrem (1999)
165 Lang & Lundholm (1996)
166 Rimmel (2003) p. 21
167 Lang & Lundholm (1996)
information asymmetry situation between them and the companies they follow. For the two interviewed analysts, the finding diverges with Trompley’s perception that (besides the reduction of the volatile effects on the entity’s income statement) hedge accounting should generate superior information for the statement users, which should help the entities to reduce an information asymmetry.\textsuperscript{168}

In addition, the fact that they consider informal, personal contacts with the firms’ CFOs as more important than information gathered from annual reports is undermining the theories regarding the usefulness of financial statements\textsuperscript{169}. If this fact is combined with the issue of voluntary disclosure mentioned above, it is possible to conclude that in this particular case hedge accounting is not leading to a reduction of cost of capital\textsuperscript{170}. According to the design of the presented theoretical framework, approaches like the provision of voluntary disclosure and useful financial statements should ultimately lower the cost of capital since an efficient capital market would appreciate such additional approaches aiming to minimize information gaps by more equally distributed information and transparent communication policies.\textsuperscript{171}

5.3 Summary of the analysis

After reviewing the empirical findings regarding the hedge accounting disclosures of the analyzed Swedish Large Cap entities, the matrixes’ scores identified that the different IFRS 7 criteria were fulfilled diverse. For those cases where disclosed information was rated with a score of 1, it is possible to say that at least the minimum standards of IFRS 7 were met. According to the IASB, IFRS 7 was introduced to increase the transparency about the risks firms bear from the usage of financial instruments. The disclosed information should so aid the decision-making process of financial statement users by providing them with helpful data to make informed judgments.\textsuperscript{172} Due to that, tested disclosure rated with a 1 could therefore be perceived as an element contributing to the usefulness of financial statements, assumed that financial statements provided in accordance with established IAS/IFRS are considered as useful. In addition, the previously presented findings exposed that some entities provided even more (and often clearer) information than the pure wording that the standard regulates (e.g. Sandvik, figure 14). Hence, such additionally disclosed information can be assessed as voluntary disclosure. According to Daske, such provided high quality information should therefore lead to a reduction of an entity’s cost of capital.\textsuperscript{173}

Otherwise, the study of the Swedish Large Cap entities showed that not all criteria regarding hedge accounting was always met (those cases where criteria were rated with a score of 0). If the discussion from above is continued consequently, one could argue that financial statements which are lacking this information can be considered as at least less useful, compared to the ones providing the required disclosure (meeting IFRS 7). The conducted binary classification and the result of the quantitative research can therefore be related to the “lemon problem”\textsuperscript{174} presented in the theory chapter. Similar to the used-car market which the lemon problem refers to, the fact that certain tested IFRS 7 criteria is met differently indicates that information is allocated asymmetric when it come to hedge accounting disclosures. For the conducted study, the provided disclosures can be considered as mixtures of complete and

\begin{thebibliography}{99}
\item Trombley (2003) p. 33
\item Gräfer & Sorgenfrei (2004) p. 4
\item Lang & Lundholm (1996)
\item Daske (2006), Esinos & Trombetta (2007)
\item Balans (2008) p. 41-42
\item Daske (2006) p. 333
\item See chapter 2.2.3
\end{thebibliography}
incomplete sets of information (even within companies which in general had a high score, some criteria were met very seldom). Thus, even though IFRS 7 is a mandatory accounting standard, the study-result indicates that the provided information still can be characterized as a “lemon market”. This perspective is supported by the already presented analysis about how the two interviewed financial analysts perceive the provided hedge accounting information. It is the lacking relevance and reliability of such disclosures which lead to the fact that they both do not resort to this kind of information, wherefore the researched hedge accounting disclosure even not corresponds with *Daske’s* opinion concerning a reduction of the entities’ cost of capital (described above). To sum up, the analysis of the available findings rather points out that the cost of capital cannot be lowered by the simple usage of hedge accounting and its necessary disclosure.

![Figure 21: Overview of the used theories (self-provided)](image)

To support the reader’s understanding, figure 21, shows which theories have been used to analyze the gained empirical findings. Furthermore, this figure points out which theories have been provided in a broader, more general context, serving a basic understanding of the subject and which of the theories and models presented in the theory chapter have been actually used to analyze the research findings. This should aid the reader to understand how the authors get to their final conclusion, presented below.
6 Conclusion

This chapter presents the conclusions the authors draw and answers the thesis’s research questions and purpose.

To which extent does the information provided in the annual reports 2007 of Swedish Large Cap entities correlate with the hedge accounting disclosure requirements of IFRS 7?

For each hedge type in IFRS 7, a specific matrix was designed in accordance to the standard’s requirements. The findings and the analysis of the matrixes’ scores point out that for FVHs approx. 88 percent of the entities’ disclosure information correlated with IFRS 7 hedge accounting requirements. For CFHs and HIFOs approx 63 respective 81 percent of the entities provided information correlating with the requirements.

The general hedge accounting requirements (paragraph 7.22), which apply for all hedge types, basically resulted in very high scores (total correlation close to 100 percent), with just a few minor deviations. Therefore we believe that it is possible to conclude, that the correlation between the findings and the standard’s requirements is in general very high. The various hedge type specific matrixes-scores showed regularly a lower correlation between the disclosure information and the IFRS 7 requirements (paragraphs 7.23 and 7.24). Furthermore, we believe that it is possible to identify a trend, showing that those criteria which require more detailed, sensitive and complex information correlate less often with the disclosures provided by the entities.

How do financial analysts perceive the hedge accounting disclosures in accordance to IFRS 7, provided in the entities’ annual reports for their decision making purposes?

Even though the matrixes-scores identified different correlations regarding the standard’s requirements and the information disclosed by the entities, the interviewed financial analysts did not perceive those inconsistencies as important issues for their daily work. The fact that IFRS 7 was recently introduced was only recognized by one of the interviewees. We believe that the conducted research shows that disclosures regarding hedge accounting of non-financial entities were not that important for the analysis purposes of the two financial analysts. In addition, disclosures in general were not of special importance for their analysis processes.

They both perceived the provided common disclosures often as standardized and overloaded with text. Instead they prefer quantitative and specific data, for instance in form of plain tables. The analysts both perceived the existing accounting regulation as extensive and complex and preferred instead alternative accounting policies which would cover more the “substance over form” perspective.

To conclude, we believe that the new hedge accounting disclosures, regulated in IFRS 7, are not very important for analysts’ decision making process when it comes to the analysis of non-financial entities.
7 Final discussion

In this chapter the authors' conclude the thesis with a final discussion regarding the research topic. Furthermore, suggestions for further research are presented.

Even though the general hedge accounting requirements, which apply for all hedge types, were fulfilled by almost all analyzed entities it is striking that the disclosed information is often of standardized and unspecific nature. The more hedge type specific criteria were met less often. We think that this could be due to the fact that those criteria are new, compared to previous regulation, and deal with more detailed, complex and often sensitive information. Therefore the entities might tend to avoid such presentations. However, since 2007 was the first fiscal year the standard was applied, we believe that the disclosure practice regarding hedge accounting will develop over the years resulting in disclosures closer to the standard setter’s objective.

The research regarding the financial analysts’ perception of IFRS 7 was challenging, since it became obvious that the interview partners were lacking a solid accounting knowledge. The concepts of hedging and hedge accounting were regularly mixed up and an understanding of the explicit standard was missing. We were surprised about that finding, since the IASB’s Conceptual Framework addresses investors as the main users of financial statements, and financial analysts can be perceived as representatives of investors. Our perception that hedge accounting disclosure is not of special importance for financial analysts is supported by the fact that the response rate of the contacted sell-side analysts was relatively low. Most of the responses that rejected a participation in this research were due to the fact that the analysts considered hedge accounting as not important for their daily work. We believe that this could be explained by the fact that the hedge accounting section of IFRS 7 is just a minor part of the whole standard and the hedge accounting activities also just cover a very small area of an analyst’s area of activity.

In our view, one interesting finding was that the interviewed financial analysts’ perceived informal contacts with the entities’ CFOs as extremely vital for their daily work, stating that such direct accesses to information was even more important than provided financial reports.

7.1 Suggestions on further research

After performing this research, we believe that it would be interesting to analyze how the results of a similar study would look like in a few years. Since an implementation of an accounting standard can be perceived as a learning process, the outcome most likely would differ. In addition to that, it would have been interesting to conduct the same study for financial institutions since hedge accounting is more vital for their business. Furthermore, we think it would be useful to evaluate the quality of the disclosed information, besides the quantitative aspects we have tested. Due to the fact that hedge accounting is perceived as a challenging accounting concept, a study focusing on the producers’ perspective, would be of great use.

Finally, a research with a larger sample size of financial analysts would help to analyze whether the presented perceptions can be generalized or not. In addition, it would be interesting if analysts following different kind of entities (size, turnover, and financial/non-financial) perceive hedge accounting in various ways.
References

Books


**Unpublished material**


**Scientific articles**


**Internet**


52


Publications


Annual reports 2007

All annual reports of the companies included in the sample size (see appendix 3). The documents were downloaded from the entities’ investors’ relations websites.
Appendix 1 “Interview guideline financial analysts”

Name: Years of work as analyst:
Company: Title:

Introduction

1. Which companies do you analyze at the Large Cap list?
2. How do you analyze annual reports and other financial reports in your work as an analyst?
   a) In general, how important is disclosed information for your work as an analyst?
3. Are you aware of the new disclosure requirement (IFRS 7) regarding financial instruments?
   a) Have you noticed a difference from previous year’s disclosure requirements regarding financial instruments in financial reports?

Hedge accounting

4. What is your opinion about companies that decide to use hedge accounting?
   a) Are there hedges that you think are of special importance when you analyze a company?
   b) Are there any differences between industries regarding the relevance of hedges and hedge accounting?
5. How important is the disclosed hedging information for your work as an analyst?
   a) Does the voluntary choice regarding hedge accounting help you to understand the companies’ risk situation in a better way?
   b) What is the most critical information in IFRS 7 regarding hedge accounting for analysis purposes?
6. How do you appraise the provided information? Do you have to deal with standardized information? Or is it mostly company-specific?
   a) IFRS 7 requires the companies to disclose qualitative and quantitative information. Which one do you assess as most important?
7. From your personal perspective, has the introduction of IFRS 7 led to an improvement regarding the disclosed information of the entities’ hedge activities?
   a) How do you perceive the differences from the previous years?
   b) Was the introduction of IFRS 7 necessary for your work as an analyst?

Additional questions

8. What is your opinion of IFRS 7 and hedge accounting in general?
   a) Is the standard necessary in order to provide a true and fair view of the companies’ risk situations?
9. Would you like to have other/more information regarding hedge accounting?
Appendix 2 “Interview guideline accounting specialist”

Name: 

Company: 

1. According to your opinion, what is the primary reason for the introduction of IFRS 7?

2. Has IFRS 7 the same importance for non-financial institutions? If not, why?

3. Do you believe that the new parts of the hedge accounting disclosures in IFRS 7 were demanded by the investors/financial analyst? Why?

4. Do you believe that IFRS 7 provides a more fair value regarding hedge accounting activities compared to previous regulation?

5. Which part regarding hedge accounting is most critical in IFRS 7, from an investor’s point of view?

6. What is your opinion about the voluntary choice of hedge accounting? Is that aiding the users to understand the risks nature in a better way?

7. The most prominent change regarding the disclosure requirements for hedge accounting, compared to earlier regulations, is those about cash flow hedges. What is the idea behind that?

8. From your perspective, which areas within hedge accounting and its disclosure requirements are discussed most in practice?
## Appendix 3: Sample size

| Yes | No | Company | Industry | Home country | Hosted service | Non-hosted service | Hosting company | Hosting service |
|-----|----|---------|----------|--------------|----------------|-------------------|-----------------|----------------|----------------|
| x   |    | x       |          |              |                |                   |                 |                |
| x   |    |         |          |              |                |                   |                 |                |
|     |    | x       |          |              |                |                   |                 |                |
| x   |    |         |          |              |                |                   |                 |                |
| x   |    | x       |          |              |                |                   |                 |                |
|     |    | x       |          |              |                |                   |                 |                |
| x   |    |         |          |              |                |                   |                 |                |
|     |    | x       |          |              |                |                   |                 |                |
| x   |    |         |          |              |                |                   |                 |                |
|     |    | x       |          |              |                |                   |                 |                |
| x   |    |         |          |              |                |                   |                 |                |
|     |    | x       |          |              |                |                   |                 |                |
| x   |    |         |          |              |                |                   |                 |                |
|     |    | x       |          |              |                |                   |                 |                |

Sample size: Entities on large cap-list OMX Nordic Exchange in Stockholm, 2008-09.
## Appendix 4 “Sample size’s use of different hedges”

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<th>Use of CFH</th>
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| Maximum: | 37 | 37 | 37 |
| Percentage: | 51,35% | 97,30% | 59,46% |</p>
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F: Fundamental
CI: Conditional
Appendix 6 “Matrix 1, Fair value hedges”

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Total:
- Maximum sample size: 19 25 19 19 14 12
- Percentage sample size: 51.28% 121.88% 100% 100% 79.62% 63.16%

Highest possible score (graded with 1): 95
Actual outcome (graded with 1): 93
Percentage: 87.57%

Definitions of disclosure requirements in IFRS 7:
- 7.22 a): a description of hedge type.
- 7.22 b): hedging instrument and the fair value at the reporting date.
- 7.22 c): the type of risk being hedged.
- 7.24 a) i): gains or losses on the hedging instrument.
- 7.24 a) ii): gains or losses on the hedge item attributable to the hedged risk.

N.B. Results concerning 7.22 a) exceed 100 percent due to the fact that the entities provide more information than mandatory (e.g. explaining a certain hedge type within their accounting principles section without applying it).
## Appendix 7: "Matrix 2, Cash flow hedges"

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<th>CFT (a)</th>
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<th>CFT (c)</th>
<th>CFT (d)</th>
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Note: The table represents the matrix 2 for cash flow hedges (CFT). Each cell indicates the use of CFT across different industries and sectors.
The table below shows the annualized rate of return on each year's cash flows for different scenarios.

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The matrix on the right illustrates the flow of cash from hedging strategies (CH).

Matrix 2: Cash Flow from Hedging (CH)
Appendix 8 “Matrix 3, Hedges of net investment”

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</tbody>
</table>

Definitions of disclosure requirements in IFRS 7:

- 7.22 a): a description of hedge type.
- 7.22 b): hedging instrument and their fair value at the reporting date.
- 7.22 c): the nature of risks being hedge
- 7.22 d): the ineffectiveness recognised in profit or loss that arises from HIFO

N.B. Results concerning 7.22 a) exceed 100 percent due to the fact that some entities provide more information than monetary (e.g. explaining a certain hedge type within their accounting principles section without applying it).