



UNIVERSITY OF GOTHENBURG  
SCHOOL OF BUSINESS, ECONOMICS AND LAW

**Impacts brought by reclassification of financial assets**  
-A study on the application of new amendments to  
IAS 39 & IFRS 7 in different bank entities

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## Abstract

**Master thesis within Business Administration, in Accounting, School of Business, Economics and Law at the University of Gothenburg, Spring 2009.**

**Title:** Impacts brought by the reclassification of financial assets - A study on the application of new amendments to IAS 39 & IFRS 7 in different bank entities

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**Supervisors:** Pernilla Mannius-Lindholm & Jan Marton.

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**Background and problem:** As of October 2008, the new amendment to IAS 39 & IFRS 7 was introduced by IASB as a direct reaction to the current turmoil in the financial market, as well as firm requests from law regulators and lobbyists. Consequently no exposure draft or comment period was arranged to fulfill the process requirements. Since this new amendment gives the IFRS followers the option to reclassify certain financial assets, it partially changes the mark-to-market requirements, and leads to the fair accounting regime to be less tied up with relevant accounting treatments. Under inactive market situations, the reclassification changes are expected to reduce the complexity of value measurements and avoid further individual write-downs. This will potentially lead to restored trust in the market and stabilized credit crunches.

**Purpose:** The main purpose of this paper is to empirically examine and analyze the impacts brought by the reclassification of financial assets, and how the reclassification are associated with different bank characteristics. Moreover, this paper is going to provide evidence indicating how the reclassification activities have affected the accounting results and financial disclosures.

**Delimitations:** The study has been limited to financial banks that operate regional or European-wide. To narrow down the sample further, the entities that are following IAS/IFRS have been looked into as they had the opportunity to adopt or not adopt the new reclassification amendment to IAS 39 and IFRS 7.

**Method:** Quantitative approach was employed in order to achieve the purpose of the paper. In addition, statistical and comparison analysis were conducted on reclassification figures, and different bank characteristics to ensure objectivity and reliability.

**Conclusion:** The reclassification findings showed that the new amendment helped the banks with the declining condition, and reduced the volatility of valuation and impairment losses. Furthermore, the logistic regression and other statistical results showed that the banks that did not apply the option were characterized by a higher ROE compared to the banks that had applied the reclassification. In regards to the non-financial characteristics, “region” was the most significant factor whereas the “operation type” did not affect the decision of entities to apply the reclassification. Lastly, the correlation between the disclosure score and total reclassification amount was strong, as the bank size played an important role.

**Suggestions for further research:** It would have been interesting to see the differences of the entities that had applied the reclassification and the entities that did not. By having a larger sample pool more comprehensive results would be obtained. Additionally, assessing how the financial market performances of many entities were as this was an area that was also affected by the introduction of the new reclassification.

**Keywords:** Reclassification; Financial assets; Disclosure; Bank characteristics

## **Abbreviations**

<b>AFS</b>	Available for Sale
<b>EU</b>	European Union
<b>FV</b>	Fair value
<b>GAAP</b>	General Accepted Accounting Principles
<b>HFM</b>	Held for Maturity
<b>HFT</b>	Held for Trading
<b>IAS</b>	International Accounting Standard
<b>IASB</b>	International Accounting Standards Board
<b>IASC</b>	International Accounting Standards Committee
<b>IFRS</b>	International Financial Reporting Standards
<b>L&amp;R</b>	Loans and Receivables
<b>SFAS</b>	Statements of Financial Accounting Standards

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# 1. Introduction

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*This chapter starts off with the background to the chosen subject, intending to highlight the subject's current interest and importance. Thereafter, a problem discussion is followed resulting in the formulation of the research questions. Finally, the purpose of this study is presented and the delimitations discussed.*

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## 1.1 Background

After the mandatory adoption of International Financial Reporting Standards (IFRS) in the European Union (EU) as of 1<sup>st</sup> of January 2005, issues regarding fair value accounting versus historical cost accounting have since then created a topic of debate among scholars and professionals.<sup>1</sup> Supporters of historical cost accounting refer to *reliability* of information that is free from error and bias, whereas advocates of fair value approach refer to *relevance* of information about current market conditions. International standard setters and regulators, such as, International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB), have lately begun to favor the use of fair value accounting in financial reporting. In their view, this approach makes it easier for various stakeholders to make knowledgeable decisions based on relevant information in the financial reports.

The fair value approach did not however anticipate the amplifying effects of the Second Great Depression. Since 2008, the largest financial credit markets have been in distress and resulted in drastic bankruptcy of large and well established financial institutions in so many countries. Commercial banks as well as investment banks are facing serious credit/liquidity issues (reflected as write-downs and/or losses in the financial reports), especially by the institutions participating on the US market. The first victim of this process was Bear Stearns. The company had a difficulty of raising sufficient new equity in time and was sold to JP Morgan Chase for \$2 per share<sup>2</sup>. It was feared that more financial institutions would follow in its footsteps.

The fact that the US economy has been in a downward spiral for over a year and spread vastly to the rest of the world<sup>3</sup>, more financial markets/institutions and non-financial entities have been affected. When looking at the figures for the total write-downs in the banking industry of 2007, the total amount was \$97 billion.<sup>4</sup> By the end of August 2008 the write-downs had reached \$501 billion, which brings a total write-down loss of \$598 billion since 2007.<sup>5</sup> More shocking predictions were followed. Bob Janjuah, chief credit strategist from Royal Bank of Scotland Group, estimated that the credit crunch would cause \$250 billion to \$500 billion of losses for the banks and mortgage brokers around the world.<sup>6</sup> Some analysts also predicted one trillion dollars for the amount of defaults and write-downs.<sup>7</sup> It is very surprising that improvised versions of exotic securities proved their disability to meet unexpected market fluctuations.

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<sup>1</sup> Muller, Karl A. et al. (2008)

<sup>2</sup> Sorkin, A. (2008) [http://www.nytimes.com/2008/03/17/business/17bear.html?\\_r=1](http://www.nytimes.com/2008/03/17/business/17bear.html?_r=1) Accessed 2009-02-08

<sup>3</sup> Hester, E. et al. (2007) <http://www.bloomberg.com/apps/news?pid=20601087&sid=aCELVKmHj1s&refer=home> Accessed 2008-05-15

<sup>4</sup> Cooper, I. (2008) <http://www.wealthdaily.com/articles/meredith-whitney-prediction/1314> Accessed 2008-05-15

<sup>5</sup> Monachino, J. (2008) [http://latimesblogs.latimes.com/money\\_co/2008/08/now-500-billion.html](http://latimesblogs.latimes.com/money_co/2008/08/now-500-billion.html) Accessed 2009-02-23

<sup>6</sup> Cimilluca, D. (2008) <http://blogs.wsj.com/deals/2007/11/07/500-billion-the-mother-of-all-write-down-estimates/> Accessed 2008-05-15

<sup>7</sup> Pressley, J. (2008) <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aHCnscodO1s0> Accessed 2008-05-16

Facing this worldwide credit crisis, the FASB and IASB started some joint discussions about how they should take action towards issues regarding financial institutions. These have included monetary and fiscal stimulus, central bank liquidity operations, and policies to promote asset market liquidity.<sup>8</sup> Overall, national authorities are getting apprehensive about the financial safety due to the fact that there are many banks involved. We believe political influences and the protection towards the safety of their own banking industry will make the issues more complicated. Both boards, the FASB and IASB, have also addressed their concerns and regulation regarding the fair value accounting on financial instruments and other problematic products since 2007. Some problems seem quite urgent because of the current recession, for instance, how to make the valuations more reliable or how to efficiently monitor the off-balance sheet items. The uncertainty and volatilities from financial markets are bringing much more challenges to auditors and other accounting professionals. The two major regulators have separately issued some guidance/discussion paper, and are still working on further clarifications.<sup>9</sup>

## **1.2 Problem discussion**

The business headlines have been dominated by the collapse of major financial institutions and other significant market players, due to the recession that began in 2007. This has led to management of many financial institutions to wonder what *exactly* the accounting numbers stand for; are the numbers symbolizing the actual losses or are the accounting figures blown out of their proportions? Although both the FASB and IASB strongly oppose the idea of changing the fair value regime and claim that fair value accounting is not the cause of the credit crisis, both regulator bodies have to work on the issues highlighted by the crisis more swiftly<sup>10</sup>. On top of that, they are also facing serious demands from some politicians and industry entities.

Nowadays every analyst agrees that obtaining accurate valuations has become so complicated that the market for such securities has crashed and banks can no longer mark instruments to the market price. The mark-to-market model does not work efficiently any more, and banks have to account on their own mark-to-model valuations. One of the approaches agreed by IASB and FASB is to allow the institutions to switch from mark-to-market to mark-to-model in certain situations where market values are not representative. However, the complex techniques themselves are vulnerable to experimental errors and subjectivities. When some of the market parameters became unobservable, the banks have to make some assumptions and adjustments with their valuation techniques. The problems with increasing reported losses and intensity of the credit squeeze still drive the debates and reforms on fair value accounting forward. The US banking industry and lawmakers have pushed to suspend or ease fair-value accounting rules, and SEC along with FASB conducted a series of studies and revisions.<sup>11</sup>

After the consultation with the Trustees of the International Accounting Standards Committee Foundation (IASCF), the IASB recognized the need to clarify IFRS/IASs to address new market developments that have cropped up in the credit crisis. On the 13<sup>th</sup> of October 2008, the IASB issued amendments to *IAS 39 Financial Instruments: Recognition and Measurement* that permit the reclassification of some financial instruments, and *IFRS 7 Financial*

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<sup>8</sup> IAS PLUS (2008) <http://www.iasplus.com/crunch/creditchunch.htm> Accessed 2008-05-30

<sup>9</sup> IAS PLUS (2008) <http://www.iasplus.com/index.htm> Accessed 2008-11-30

<sup>10</sup> Deloitte Touche Tohmatsu (2008) <http://www.deloitte.com/dtt/article/0,1002,cid%253D228200,00.html> Accessed 2009-02-11

<sup>11</sup> SEC (2008) <http://www.sec.gov/spotlight/fairvalue.htm> Accessed 2009-02-14

*Instruments: Disclosures* that require additional disclosures in respect of any reclassification made. These amendments were issued to address the current market conditions, and were therefore issued fairly rapidly.<sup>12</sup> Noticeably the similar reclassifications have been permitted by SFAS 115 and SFAS 65 under US GAAP, before IASB introduced its amendments. The standard-setter has also been closely monitoring the developments in the United States and other jurisdictions in order to increase comparability and avoid unnecessary inconsistencies in accounting treatments<sup>13</sup>.

Since this new amendment gives the IFRS followers permission to reclassify certain financial assets, it partially changes the mark-to-market requirements, and the relevant accounting treatments are less tied with fair accounting regime. Under inactive market situations, the reclassification changes are expected to reduce the complexity of value measurements and avoid further individual write-downs. This is done to restore the trust for the market and stabilize the credit crunches. On the other hand, the new amendments were introduced to react in light of the current market environment. Hence no exposure draft or comment period was arranged to fulfill the process requirements. Potential problems and practical that have been foreseen are therefore pending on the reviews during the implication process.

Nevertheless, the impacts brought by the new amendment could be significant. For example, in the third quarter, right after the new amendment was introduced, it was reported that Deutsche Bank was the first large EU financial institution to implement this new rule. The reclassification brought profit instead of a projected loss by re-categorizing €24.9bn (\$31.2bn) of loan exposure. In its third quarter they avoided €845m in write-downs due to the new accounting change, and were able to report a net income of €414m instead of a €122m loss. Deutsche Bank shares rose 18 percent to €20.20 in Frankfurt. This shows that other banks may also benefit from these changes.<sup>14</sup> However, not all banks chose to follow this new amendment. According to a recent report from The Committee of European Security Regulators (CESR), half of the sampled financial companies did not apply this amendment in their third quarter 2008 financial statements. Another report from Finish banking authority showed that only 5 out of 8 banks reclassified financial assets as the amendment allowed. Thus it is very interesting to study the subsequent consequences brought by the new regulatory adjustment, to see if the bank entities with different characteristics applied the option or not and how relevant information was disclosed.

### **1.3 Research questions**

Based on the previous background and problem discussion, the following research questions can be addressed:

- *What are the results brought by the reclassification of financial assets (allowed by the new amendments to IAS 39 and IFRS 7) in banks?*
- *How are the non-financial and financial characteristics of banks involved with the reclassification carried out by the various banks?*

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<sup>12</sup> Deloitte Touche Tohmatsu (2008) <http://www.deloitte.com/dtt/article/0,1002,cid%253D228200,00.html> Accessed 2009-02-11

<sup>13</sup> KPMG (2008) <http://www.kpmg.com.au/Portals/0/08FR-49.pdf> Accessed 2009-02-13

<sup>14</sup> Freshfields Bruckhaus Deringer (2009) <http://www.freshfields.com/publications/pdfs/2009/jan09/24930.pdf> Accessed 2009-02-11

- *How is the disclosure on the new reclassification, associated with different bank characteristics?*

## **1.4 Purpose**

The main purpose of this paper is to empirically examine and analyze the impacts brought by the reclassification of financial assets, and how the reclassification are associated with the different bank characteristics. Moreover, this paper is going to provide evidence indicating how the reclassification activities have affected the accounting results and financial disclosures.

## **1.5 Delimitation**

The study has been limited to financial banks that operate regional or European-wide. To narrow down the sample selection further, the entities that are following IAS/IFRS have been looked into as they had the opportunity to adopt or not adopt the new reclassification amendment to IAS 39 and IFRS 7.

## **1.6 Disposition**

*Chapter 1 Introduction:* Chapter starts off with the background to the chosen subject, intending to highlight the subject's current interest and importance. Finally, the purpose of this study is presented and the delimitations discussed.

*Chapter 2 Theoretical Framework:* Presents general concepts/theories to enable the reader to get a sound knowledge of what reclassification is. The framework will also be employed as a basis to analyze the reclassification findings.

*Chapter 3 Methodology:* The methodology presented in this chapter aims to provide a presentation of the research strategy that will be used in the thesis and how the collection of data will come about.

*Chapter 4 Findings and discussion regarding the application of reclassification:* In order to find out what impacts have been brought by the new reclassification of financial assets, relevant findings extracted from the researched banks annual reports of 2008 will be presented and discussed in this part of the chapter. To make the findings clearer, constructed tables, graphs and discussion have been added where necessary.

*Chapter 5 Statistical results and analysis:* The chapter will build upon the reclassification findings and discussions made in chapter 4. In addition, the reclassifications findings will be analyzed through statistical and comparison analysis to ensure objectivity and reliability of the gathered data.

*Chapter 6 Conclusion and suggestion for further research:* The final chapter will answer the paper's purpose and research questions based on the findings made, and the statistical results and analysis. Lastly, suggestions for further research will be presented.

## 2. Theoretical Framework

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*The theoretical framework presents general concepts/theories to enable the reader to get a sound knowledge of what reclassification is. Furthermore, the framework will also be employed as a basis to analyze the reclassification findings that will be found in chapter four.*

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### 2.1 IASB's conceptual framework

It is not a new phenomenon that the capital markets have become more global over the past decade, and as a result entities have gained access to new customers and markets. For IASB to attain a harmonized regulation, the *Framework for the Preparation and Presentation of Financial Statements* was adopted in 2001. The two central attributes of the Framework is the *objective* of the financial reports, and indentifying *qualitative characteristics* which play a decisive role when it comes to the usefulness of the information reported in the financial statements. The Framework describes the basic concepts by which financial statements are prepared, and serve as a foundation for unresolved accounting issues that are not addressed in IAS/IFRS or Interpretation. If a clash between the standard and the conceptual framework were to arise, the specific standard is prioritized.<sup>15</sup> The general purpose of financial statements is to provide different user groups, primarily investors who provide risk capital, with information that they need in order to make an economical decision. Hence the provided information should also include the enterprises financial position, performance and changes that have taken place.<sup>16</sup>

IASB's conceptual framework identifies four attributes that enables the financial statement users to deal with information in financial statements. They are understandability, relevance, reliability and comparability. The concept of *understandability* arises when the statements in financial reports are presented in a way that is understandable by the users, and a necessary precondition is that they have prior knowledge within business, economics and accounting.<sup>17</sup> Information included in financial statements is *relevant* when it enables the users to make rational economic decisions, and also help them to evaluate the past, present or future of the reporting entities economic track record.<sup>18</sup> Thus relevant information should eliminate insecurity among the users by going into detail about the assumptions used, and state the underlying grounds for those assumptions that were made. For the information to be regarded useful it must also be *reliable*. This entails that the information is free from material error and bias, and present events and transactions correctly.<sup>19</sup> The last qualitative characteristic, *comparability*, helps the users to compare financial statements of an entity over time so that they can identify trends when it comes to its financial position and performance. The objective with the comparability characteristic is to aid various user groups to compare the financial statements of different entities, before making their decisions.<sup>20</sup> That is why uniform rules are a necessity when reducing the opportunity for the entities to use different accounting methods and policies.

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<sup>15</sup> IAS PLUS (2009) <http://www.iasplus.com/standard/framework.htm> Accessed 2009-02-26

<sup>16</sup> Artsberg, K. (2005) p. 136

<sup>17</sup> IASB Framework for the Preparation and Presentation of Financial Statements paragraph 25

<sup>18</sup> IASB Framework for the Preparation and Presentation of Financial Statements paragraph 26-28

<sup>19</sup> IASB Framework for the Preparation and Presentation of Financial Statements paragraph 31-32

<sup>20</sup> IASB Framework for the Preparation and Presentation of Financial Statements paragraph 39-42

Accounting distortions can arise from the trade-off between relevance and reliability. For the past years the standard-setters, IASB and FASB, have favored the use of relevance when putting the best interest of investors to make knowledgeable decisions. For investors, financial reports are considered relevant when they reflect transactions that are close to reality. However, some problematic factors such as lower objectivity and susceptibility to manipulation can affect the presented information. The IASB has therefore stated in paragraph 45 that judgment is required to provide a balance in the accounting, and financial reporting.

## **2.2 Fair Value Accounting versus Historical Cost Accounting**

In recent years scholars are getting more interested in researching about issues related to financial instruments. The discussions have become more intense as a result to the turbulent crisis that began in July of 2007. Studies related to fair value accounting and historical cost accounting have been looked into, starting from section 2.2.3, to highlight some interesting perspectives which are relevant with the current situation and our paper.

### **2.2.1 Fair value accounting regarding financial instruments**

The move toward fair value accounting can be seen as a revolution in financial accounting and, will for better or worse, alter the nature of the financial statements. IASB's definition of fair value, meaning a current market value and found in most of its standards, defines it as follows: "*Fair value is the amount for which an asset or liability can be exchanged between knowledgeable, willing parties in an arm's length transaction.*"<sup>21</sup> It implies that in an active market the fair value is equivalent to the observed market price, whereas in no active market, the fair value becomes an estimate of the value in use. Furthermore, the standard setter US FASB developed a three-tier *fair value hierarchy (SFAS 157)* to increase consistency and comparability in fair value measurements and related disclosures<sup>22</sup>. The fair value hierarchy of the IASB uses a similar structure/idea when it comes to prioritizing observable inputs that are based on market data and assumptions over unobservable inputs that are conducted by the companies own assumptions. A difference between the two is how they are expressed. The three levels of inputs that entities should follow when determining the fair value are as follows:

- **Level 1:** Using quoted prices for identical assets or liabilities in active markets when information is available as of the measurement date. This level of the hierarchy is also the most important for the financial statement users. Listed equity securities on major exchanges and exchange traded derivatives are some financial assets/liabilities that are found on this level.
- **Level 2:** If quoted prices (or inputs) are not available for identical assets or liabilities, then you should use prices of similar assets or liabilities. In this level you can find securities borrowed/loaned and traded loans.
- **Level 3:** If quoted prices cannot be applicable in level 1 or 2, prices are often derived from using valuation methods based on present value techniques of future earnings or cash flows. This to determine the fair market value of an instrument.

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<sup>21</sup> IAS 16.6

<sup>22</sup> SFAS 157 Fair Value Measurements

Private equity investments and illiquid loans are included in this level of hierarchy.

All levels in the hierarchy should be considered when estimating fair value of assets or liabilities, but as seen in the pyramid in Figure 1 level 3 should be used carefully as a subjective assessment is crucial. When comparing Level 3 inputs to level 1 and 2, judgment based on, for instance, future cash flows, unquoted equity securities or even share-based payments are entity specific. That is two companies can measure assets/liabilities differently due to diverse borrowing rates and managerial appraisal. As a result, the reliability of fair value from liquid markets to non-traded items declines.<sup>23</sup>

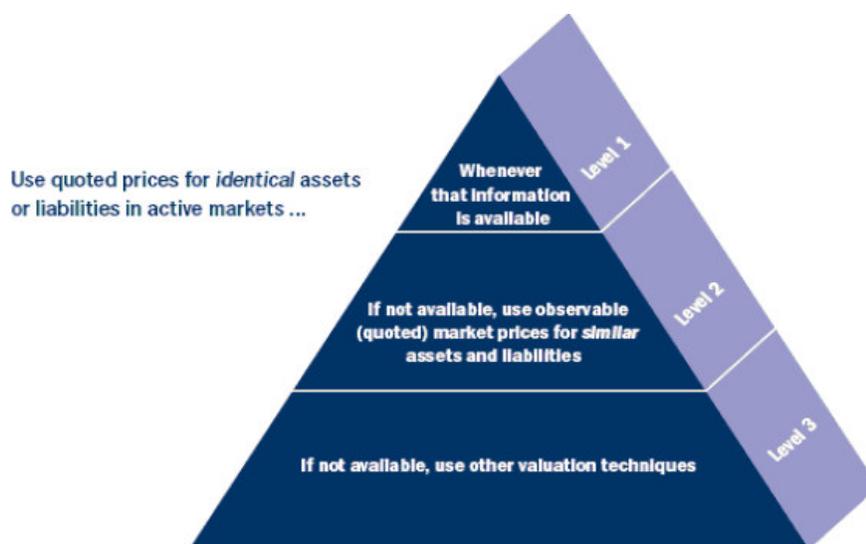


Figure 1: A pyramid of the Fair Value Hierarchy<sup>24</sup>

Fair value accounting has undergone changes both under IFRS and US GAAP which has led to companies to be less tied to market prices. This has been particularly observed in inactive markets, and may be able to avoid individual write-downs. The first change that was made was on the fair value hierarchy that requires financial instruments to be valued using observable market inputs where available. The second change that took place was on ability to reclassify financial instruments from trading to holding to avoid the market-to-market requirement.<sup>25</sup> On the subject of fair value accounting in regards to financial instruments and other problematic products, the IASB along with FASB, have been addressing issues and guidance since 2007. Some problems, for instance, how to make valuations more reliable, have been quite urgent due to the downward spiral. It is for that reason that both boards have separately issued some guidance/discussion paper and are still working on further clarifications.<sup>26</sup>

Overall, IASB have made statements which include the clarification on how to determine the active/inactive market: “A significant increase in the big spread between the amount sellers are 'asking' and the price that buyers are 'bidding', or the presence of a relatively small number of bidding parties, are indicators that should be considered in determining whether a

<sup>23</sup> CGA (2005) [http://www.cga-canada.org/en-ca/AboutCGACanada/CGAMagazine/2005/Sep-Oct/Pages/ca\\_2005\\_09-10\\_ft2.aspx](http://www.cga-canada.org/en-ca/AboutCGACanada/CGAMagazine/2005/Sep-Oct/Pages/ca_2005_09-10_ft2.aspx) Accessed 2008-11-27

<sup>24</sup> Ernst & Young (2005) [http://www2.eycom.ch/publications/items/ifrs/single/200506\\_fair\\_value/en.pdf](http://www2.eycom.ch/publications/items/ifrs/single/200506_fair_value/en.pdf) Accessed 2008-11-28

<sup>25</sup> Freshfields Bruckhaus Deringer (2009) <http://www.freshfields.com/publications/pdfs/2009/jan09/24930.pdf> Accessed 2009-02-11

<sup>26</sup> IAS PLUS (2008) <http://www.iasplus.com/index.htm> Accessed 2008-11-30

*market is inactive.*<sup>27</sup> In addition, the financial assets under the evaluation of level 2 and level 3 are more likely to be inactive in the trading market. If the entities experience valuation losses or foresee a downward trend, they are more likely to reclassify from level 2 or level 3 financial assets just as the amendment allows.

## 2.2.2 Historical cost accounting regarding financial instruments

Until recently, financial accounting has been primarily based on the *historical cost model*. Under the valuation technique, asset and liability values are determined on the basis of prices obtained from actual transactions that have occurred in the past. Historical cost model has, however, been subject to many criticisms. One being that the model is only interested in cost allocations, and not the current market value of an asset or a liability that could be higher/lower than it suggests. Another major criticism is its flaws in times of inflation. When adopting the historical cost model, it is expected that the currency in which transactions are recorded remains stable, but we know that an asset purchased today may be expensive in the future.<sup>28</sup> Even though the historical cost model provides accurate and reliable financial statements, the comparability (e.g. qualitative characteristic) is jeopardized as a result of historical cost accounts become unhelpful when comparing entity performance and financial position.

The financial assets and liabilities that are recognized and treated under the historical cost accounting belong to the categories of “loans and receivables” and “held to maturity”. Thus two basic concepts included in these categories are “amortized cost” and “effective interest method”. The standard IAS 39 defines the amortized cost as “*the amount at which the financial asset or liability is measured at initial recognition minus principal payment, plus or minus the cumulative amortization of any difference between the initial amount and the maturity amount, and then take out any write-down for impairment or uncollectability*”. In order to obtain the amortized amount, the effective interest rate is used to discount the expected cash payments through maturity or the next market-based pricing date to the current net carrying amount. Sometimes the effective interest rate is expressed as the internal rate of return on relevant financial asset/liability, as the level yield to maturity or to the next pricing date. The fact that the reclassification amendment states that value adjustments occurred during the transfers should be reflected through the changes of effective interest rate rather than the adjustment to the carrying amounts of assets. It is logical to include the understanding of the effective interest rate as supplementary information which is helpful to study relevant issues regarding this regulatory modification.

Under historical cost accounting, the income statement is the primary vehicle for conveying information about value to shareholders, and not the balance sheet. In contrast to fair value accounting, current income forecasts future income on which a valuation can be made. In short, value is added by arbitraging (entry and exit) prices in input and output markets. Historical cost accounting does not report the (present) value of expected outcomes from the business plan. Rather, it reports on progress that has been made in executing the plan.

At the initiative development stage of accounting for financial instruments, the regulators set up a benchmark treatment including fair value for trading items and historical cost for the

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<sup>27</sup> IAS PLUS (2008) <http://www.iasplus.com/index.htm> Accessed 2008-11-30

<sup>28</sup> Thompson, K. (2007) [http://www.associatedcontent.com/article/110085/advantages\\_and\\_disadvantages\\_of\\_historical.html?cat=3](http://www.associatedcontent.com/article/110085/advantages_and_disadvantages_of_historical.html?cat=3) Accessed 2009-03-03

other items. In fact, as a compromising solution, this benchmark treatment accelerates the discussion about which approach is more appropriate to present the accounting information on financial instruments. Many advocates of fair value accounting believe that measuring financial instruments at historical cost does not always provide relevant information for users. As a result, the proposals developed by these advocates encourage the application of full fair value accounting on financial instruments. It was very popular until the crisis spread across the financial sectors.

### **2.2.3 Prior studies on Fair value accounting versus Historical cost accounting**

In this section a few studies regarding fair value accounting versus historical cost accounting were looked into, as they discuss the issue in a broad context from a scholar perspective. It can therefore give us additional information that can be employed for the analysis chapter.

According to some previous conceptual analysis papers, the perception of historical cost accounting is often misinterpreted in these debates (Benston, 2006 & Penman, 2007). One criticism that both authors mention is that historical costs are mainly obsolete. However, some studies concerning how historical cost works for valuation and performance assessment, indicated that historical cost accounting procedures are more reliable and verifiable when tests were conducted on certain assets (Nichols & Buerger, 2006). Although historical costs do not often provide measures of value, they are useful for investment decisions done by relevant parties (e.g. investor and management team). They need the numbers for managerial and control making-decisions as the historical numbers are targeting on the disposition of resources<sup>29</sup>.

The historical cost accounting has some advantages over fair value accounting, but the shortcomings of fair value accounting were also used to demonstrate some problematic issues. The first issue concerned the fair value regime, and the second issue was about the argument that loosens the fair value restriction on financial instruments. Penman (2007) and Benston (2008) pointed out that when level 1 of fair value hierarchy does not apply, fair value based on related information or professional judgments are costly to determine and verify. Furthermore fair values, other than those taken from quoted prices level 1, could be readily manipulated by opportunistic and overoptimistic managers (Ramanna, 2008). These are some opinions that could be a motive for the regulators to introduce the new amendment, if the political influences are put aside. One thing is certain; the outcomes brought by the new reclassification procedure needs to be evaluated.

### **2.2.4 Prior studies on the characteristics of Historical cost accounting and Fair value accounting**

The debates about historical cost and fair value accounting are significantly involved with the basic characteristics of accounting regimes, such as, *relevance* and *reliability*. Relevance, as mentioned above, requires financial reporting to fulfill the different demands of different user groups. Conceptually, the relevance of accounting information is affected by its nature and materiality. Reliability is also heavily considered when evaluating the fair value accounting.

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<sup>29</sup> Benston, G. J. (2006) p. 465

Many arguments concerns potential increase in relevance versus the potential decrease in reliability. Among the previous literatures, many empirical analysis papers focus on these two qualitative characteristics. The relevance discussed by most of the prior research is referring to the value relevance that associates accounting numbers with security market values. The researchers tried to determine whether fair value disclosures in the banking industry have incremental information content and explanatory power over and above historical cost (Barth et al., 1996; Eccher et al., 1996 & Khurana et al., 2003). However, the results of these empirical tests have not been consistent. For instance, Eccher et al (1996) got mixed results on the significance of regression coefficients for loan fair values.

Due to the complexity and variety of financial instruments, the research on reliability tests of fair value accounting and historical accounting has been less developed than the similar research conducted on other accounting items such as inventory and investment property. Landsman (2005) concludes that the evidence on fair value reporting supports its relevance. With regards to reliability, he suggests that there is some uncertainty using evidence from the previous paper (Barth, Landsman, and Rendleman, 1998) based on testing a pricing model for corporate bonds. Brien (2006) considered the importance and reliability of models regarding the fair values of loans, and points out a number of reliability issues that are still under development. For instance, the extent of how the model is used, the range of models and estimation methods that might be employed, and the likely accuracy of reported fair values.

*Comparability* is another qualitative characteristic that is sporadically involved with the discussion about the two accounting regimes. The IASB's efforts have resulted in the adoption of IFRS by a considerable number of countries. Among the 99 countries that have either adopted or permitted the use of IFRS for domestic listed companies as of August 2008, approximately 80 percent are from emerging capital market<sup>30</sup>. The application of international accounting regulation definitely improves the consistency of accounting treatments. However, when empirical samples of various countries are considered, there is a concern that the convergence of accounting standards may not lead to convergence of accounting practices if firms do not comply with the standards (Street, Gray, & Bryant, 1999; Street & Bryant, 2000). Partially the problem is caused by the fact that the newly developing countries do not have enough qualified accounting professionals (Eccher & Healy, 1996). For this new regulatory modification, it would be interesting to see whether inconsistent disclosures or practices are emerged from the different sampling regions.

## **2.5 Amendments to IAS 39 & IFRS 7 - Reclassification of financial assets**

When given the requests to address the new market developments, the IASB recognized the need to clarify IAS/IFRSs as a response to the credit crisis. They wanted to make sure that European financial institutions were not deprived the opportunity to compete among their international competitors, in terms of accounting rules and of their interpretation. To create a "level playing field" with US GAAP, regarding the ability to reclassify financial assets, IASB monitored the developments in the United States to avoid inconsistencies under both accounting standards.<sup>31</sup> The changes to *IAS 39 Financial Instruments: Recognition and Measurement* and *IFRS 7 Financial Instruments: Disclosures* approved by the EU on 15<sup>th</sup>

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<sup>30</sup> Deloitte Touche Tohmatsu (2009) <http://www.iasplus.com/country/useias.htm> Accessed 2009-03-16

<sup>31</sup> KPMG (2008) <http://www.kpmg.com.au/Portals/0/08FR-49.pdf> Accessed 2009-03-01

October 2008, allows reclassifications of certain financial instruments under “held for trading” to either “held to maturity”, “loans and receivables” or “available for sale”. Also it permits transfer of certain financial assets from the category of “available for sale” to “loans and receivables”. As we mentioned earlier, the amendments were introduced to enable bank entities to record instruments which are no longer traded in an active market at amortized costs instead of mark-to-market values<sup>32</sup>. We expect to see less volatility and other emerging issues after the amendment has been applied. The earliest date to reclassify the relevant financial assets is 1<sup>st</sup> of July 2008, and all of the assets are measured at their fair value on the date of reclassification.

### 2.5.1 Derivatives and non-derivative financial assets

According to the amendments, the regulatory changes do not concern the classification and measurement of derivatives. Derivatives still follow the previous rules set by IAS 39, which require derivatives to be measured at “fair value through profit or loss”. The only exception is when they are used in cash flow hedge accounting. The fair value changes are then recognized in equity. However, since there are certain instruments as embedded derivatives, the initial amendment became ambiguous regarding the reclassification of this type of instrument. According to the latest proposal published by IASB, it requires all embedded derivatives to be assessed and, if necessary, separately accounted for in financial statements. Nevertheless, the further diversity among practices needs to be more closely monitored.

Non-derivative financial assets are majorly involved with the reclassification rules. Under the initial recognition of IAS 39, a non-derivative financial asset is classified into one of the following categories: *fair value through profit and loss*; *loans and receivables*; *available-for-sale*; or *held-to-maturity*. Within the category of fair value through profit and loss, the non-derivative financial assets can be divided into two groups: *held for trading*; or, upon initial recognition, is designated by the entity as measured at *fair value through profit or loss*.

### 2.5.2 Subsequent classifications

As stated in the amendment, the non-derivative financial assets under “held for trading” can be reclassified into “available for sale” or “held for maturity” when exposed to rare circumstances, and into “loans and receivables” when meet the definition of “loans and receivables”. More specifically, trading debt securities that are not loans and receivables can be reclassified to held-to-maturity (that is, measured at amortized cost) only if the entity has the intent and ability to hold them until maturity. If the entity decides to sell the securities, for example, when there are changes in market conditions this may taint the entire held-to-maturity portfolio requiring it to be fair valued through equity for the next two annual reporting periods.<sup>33</sup>

The conditions when financial assets are transferred out of “available for sale” and “held for trading” into “loans and receivables” (that is, measured at amortized cost) include: the definition of loans and receivables at initial recognition is met by the relevant financial assets,

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<sup>32</sup> Ernst & Young (2008) [http://www.ey.com/Global/assets.nsf/Russia\\_E/IFRS\\_Book\\_Supplement\\_ENG/\\$file/IFRS\\_Book\\_Supplement\\_ENG.pdf](http://www.ey.com/Global/assets.nsf/Russia_E/IFRS_Book_Supplement_ENG/$file/IFRS_Book_Supplement_ENG.pdf) Accessed 2009-02-10

<sup>33</sup> KPMG (2008) <http://www.kpmg.com.au/Portals/0/08FR-49.pdf> Accessed 2009-02-13

and the entities have the intentions and abilities to hold the financial assets for the foreseeable future or until maturity. Before or after the reclassification, financial assets cannot be reclassified into fair value through profit or loss after initial recognition. It remains the same and there has been no amendment to this requirement.

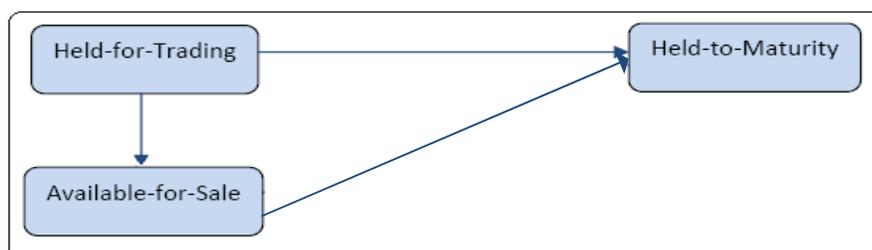


Figure 2: Reclassification to Available for Sale or Held to Maturity<sup>34</sup>

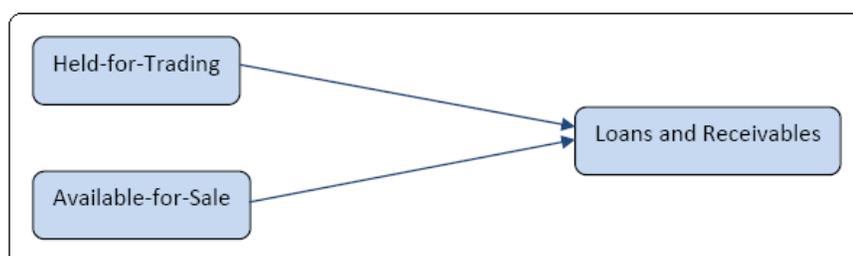


Figure 3: Reclassification to Loans and Receivables<sup>35</sup>

When the financial assets have been reclassified out of fair value through profit or loss, or available for sale, the consequent effect is recognized as an adjustment to the effective interest rate from the date of the change in estimates rather than as an adjustment to the carrying amount of the asset. The entities increase their estimations on future cash flows because of expected increased recoverability. Hence, the change in expectation is recognized in profit or loss over the remaining holding period as part of interest income. The effect of the change in expectation is not recognized immediately in profit or loss<sup>36</sup>. It can be seen as an attempt for IASB to avoid dramatic profit changes and prevent misinterpretation of the reclassification. The actual effects could be evaluated by analyzing financial disclosure of bank entities.

Regarding details of reclassification, the following table provides a summary of the changes to provide a more precise theoretical structure:

Category	Measurement	Type of security	Subsequent reclassification
Fair value through profit or loss - designated	Fair value through Profit or loss	Debt	No permission to reclassify
		Equity	
		Loans and Receivables	
Held-for-trading	Fair value through Profit or loss	Debt	Held-to-maturity or available-for-sale
		Equity	Available-for-sale
		Loans and	Loans and receivables

<sup>34</sup> Russell Bedford Hong Kong (2008) <http://www.russellbedford.com/downloads/rbhk-accountingupdate.pdf> Accessed 2009-02-15

<sup>35</sup> Ibid

<sup>36</sup> KPMG (2008) <http://www.kpmg.com.au/Portals/0/08FR-49.pdf> Accessed 2009-02-13

		Receivables	
Held-to-maturity	Amortized cost	Debt (with fixed maturity)	Reclassify to available-for-sale
Available-for-sale	Fair value through Equity	Debt	Reclassify to held-to-maturity
		Equity	No permission to reclassify
		Loans and receivables	Loans and receivables
Loans and Receivables	Amortized cost	Loans and receivables	No permission to reclassify

- : Categories marked with this color signify no changes to the existing requirement  
 : Categories marked with this color indicates that the new amendment is applied

Figure 4: An illustration of reclassification under the new amendment<sup>37</sup>

### 2.5.3 Rare circumstances

The definition of rare circumstances arises from a single event that is unusual and highly unlikely to recur in the near term. Although IASB does not provide any specific example regarding “rare circumstances”, the press release on 13<sup>th</sup> of October 2008 mentioned that “*the deterioration of the world’s financial markets that has occurred in the third quarter of this year is a possible example of rare circumstances cited in these IFRS amendments*”<sup>38</sup>. However, IASB believe that if assets are reclassified due to “rare” circumstances, then such assets need to be reclassified as of the same date since there has been only one “rare” event.

### 2.5.4 Additional disclosures - IFRS 7

To make transparent to users, the reclassification brings more extensive disclosures requirements upon IFRS 7. Hence in the amendment standards, it states that an entity should disclose specific information if it applies these amendments. To begin with, the amounts reclassified in and out of each category along with the relevant reasons are required for disclosure. Secondly, an entity has to disclose: “*for each period following the reclassification, including the period in which the financial asset was reclassified, until derecognition of the financial asset, the fair value gain or loss that would have been recognized in profit or loss or other comprehensive income if the financial asset had not been reclassified, and the gain, loss, income and expense recognized in profit or loss*”<sup>39</sup>. Thirdly, the financial reports shall include the effective interest rate and estimated amounts of cash flows the entity expects to recover, as at the date of reclassification of the financial asset. The six disclosure items can be seen in figure 5 below:

<sup>37</sup> KPMG (2008) <http://www.kpmg.com.au/Portals/0/08FR-49.pdf> Accessed 2009-02-13

<sup>38</sup> IASB (2008) <http://www.iasb.org/News/Press+Releases/IASB+amendments+permit+reclassification+of+financial+instruments.htm> Accessed 2009-02-11

<sup>39</sup> KPMG (2008) <http://www.kpmg.com.au/Portals/0/08FR-49.pdf> Accessed 2009-02-13

<p><b>In the period of reclassification:</b></p> <p>(a) The amounts reclassified in and out of each category;</p> <p>(c) Description of the financial assets reclassified in "rare circumstances";</p> <p>(d) The fair value gain or losses on the financial asset recognised either in profit, loss or in equity in that reporting period and the previous reporting period;</p> <p>(f) As at the date of reclassification, the effective interest rates and estimated amounts of cash flows the entity expects to recover;</p>
<p><b>For each reporting period until derecognition of the reclassified financial asset:</b></p> <p>(b) Carrying amounts and fair values of all financial assets reclassified in current and previous reporting periods;</p> <p>(e) The fair value gains or losses that would have been recognized in profit, loss or equity if the financial asset had not been reclassified</p>

Figure 5: Disclosure items extracted from IFRS 7.12A<sup>40</sup> (self-provided)

### 2.5.5 Prior studies regarding disclosure on reclassification and entities' characteristics

As a newly introduced amendment, the disclosure rules on reclassification need more practical tests and experience to reveal further issues. However, being an important part of 2008's annual report, the disclosure with regards to reclassification may still be affected by the characteristics of different firms. For that reason some previous studies have been looked into for inspiration. The extent and quality of disclosure in annual reports has been of strong interest to researchers and market investors. In the study of Healy and Palepu (2001), theoretical backgrounds for this type of studies are summarized as agency conflicts and information asymmetry. They also grouped relevant literatures as four categories: *the function of disclosure to help with information and agency problems*; *the effectiveness of monitoring disclosure*; *factors affecting decisions by managers on financial reporting and disclosures*; and *the economic consequences of disclosures*. Of the four categories, our study is closer to the third category. Since the research from this category are very extensive, we would like to focus more on studies that provide valuable ideas to develop disclosure evaluation approach and select relevant factors. In later chapter, some studies helped with constructing the analysis model and literatures relevant to financial instruments were used for results comparison. Moreover, the incorporation with other managerial issues emphasizes the importance of high-quality disclosure, as it was noted that disclosure helps entities to attract more potential investors.

Many studies were conducted to investigate the relationship between disclosure and different entities. Cooke (1989) found significant differences in the disclosure provided between the unlisted and listed sample groups. In addition, he also saw a significant association between the size of the company and the extent of disclosure. In his paper he applied a denominator-adjusted disclosure index, which was an innovative approach to evaluate the extent of voluntary disclosure. However, some studies only used un-weighted disclosure checklist. For instance, Hossain et al. (1994) tested the following firm-specific characteristics: firm size, total assets, leverage level, auditor type, and foreign listing status on listed companies from New Zealand. They got significant correlation between voluntary disclosure with firm size, leverage, and foreign listing. Nonetheless, the results about the company-specific characteristics are not always consistent. The empirical test conducted by Alsaeed (2006)

<sup>40</sup> IAS PLUS (2008) <http://www.iasplus.com/iasplus/0810reclassifications.pdf> Accessed 2009-04-20

demonstrated that profitability, liquidity, audit firm and other non-financial variables had insignificant relationships with the level of disclosure.

It is interesting and reasonable that when most of these statistical studies select samples, researchers tend to avoid the financial institutions. We think it is because the disclosure of financial institution is restricted under complicated regulations (e.g. Basel II), which might hinder the results. However, in our case, the reclassifications of financial assets introduced by the new amendment are more relevant with financial entities. Hence their disclosures are more informative and valuable for evaluation, and to test the relationship with entities' characteristics.

## **2.5.6 Evaluating whether a financial asset should be reclassified**

The IFRS followers can take advantage of the amendments when making an assessment; whether a qualifying financial asset should be reclassified or not. The following issues<sup>41</sup> should be taken into regards:

- The new amendments do not allow any financial asset that has been reclassified out of “fair value to profit or loss” category to be reclassified back into the category in the future. Consequently, if the financial asset should be carried at amortized cost after reclassification, future increases in fair value will not be reflected in the balance sheet immediately.
- If other entities in the industry will reclassify similar financial assets held.
- Whether an embedded derivate (that include for instance prepayment options in loans) will be required to be recognized separately at its fair value on reclassification of the financial asset.
- If systems will be able to track and correctly measure assets of a similar nature which are classified differently.
- Implications for any template disclosures that have already been prepared in respect of an approaching year end or a year end that has passed but has not yet been reported on.
- Whether reclassification will result in any benefit to the entity, especially for those financial assets that will be classified as “available for sale”. For example exchange differences on available for sale instruments will continue to be recognized in the income statement, and if the instruments were to decrease in value, all amounts recognized in equity will be reversed out of equity and into profit and loss.

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<sup>41</sup> Deloitte Touche Tohmatsu (2008) <http://www.deloitte.com/dtt/article/0,1002,cid%253D228200,00.html> Accessed 2009-03-15

### 3. Methodology

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*The methodology, presented in this chapter, aims to provide a presentation of the research strategy that will be used in the thesis and how the data collection came all about. The chapter ends with an assessment of the reliability and validity of the paper.*

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To approach the research questions we used Bryman and Bellman's *Business Research Methods*. It introduces the core concepts, methods and values involved in doing a research. Keep in mind that applying the guidance will make us aware of the dos and don'ts when employing a particular approach, to collecting and analyzing the data. Such awareness will in addition lead to many pitfalls to be avoided.

#### 3.1 Research strategy

As stated by Bryman and Bell (2007) there are two distinctive methods that can be employed when collecting data: *quantitative* and *qualitative* method. A quantitative research puts emphasis on quantification in collection and analysis of data, whereas a qualitative research put emphasis on why something has happened. Most researchers tend to employ one of the two paradigms, and that will be the same case for us. Quantitative research will be employed to ensure objectivity, generalizability, and reliability when looking at the bank entities that has been selected from the population in an unbiased manner<sup>42</sup>. In addition, the idea is to facilitate an investigation on how bank entities applied the new amendment in fiscal year 2008, and how the application of reclassification was conducted as a new accounting choice. The quantitative method may have its shortcomings, but statistical methods will be used, see section 3.3, and for that reason we believe that the paradigm will be beneficial for our paper.

The scientific approach can be described as a method of reasoning, and are usually referred to as *deductive*, *inductive* and *abductive* approaches<sup>43</sup>. Under the deductive approach, researches usually aim to test developed theory or hypothesis based on exploring the findings and observations. According to Bryman and Bell (2007), a deductive approach is a process where you start from theory to findings. Hence it is very common that the quantifiable data and analysis are applied in this process. In contrast, the inductive approach is a reversed process that begins with developing findings to theory (Bryman and Bell, 2007). During this process, the empirical data will be observed and analyzed in order to develop new theory or make predictions (Saunders et. al, 2003). Abductive is an interaction between deductive and inductive approach. Since deductive approach is incorporated in quantitative method, it will be the approach that will be followed. The deductive approach will begin in the theoretical framework where relevant theories/concepts will be employed, and after that a research will be conducted. The results will then be constructed in the empirical findings.

A research strategy is a general orientation on how to conduct a business research. Our overall research strategy is based on *explanatory study* and *descriptive study*. According to Robson (2002), the purpose of explanatory study is to explain and describe the reasons for the results. The descriptive study, on the other hand, reveals the objective's profiles, patterns or situations. Firstly, the use of descriptive study will give us an understanding and the results of applying

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<sup>42</sup> Weinreich, N. (2006) <http://www.social-marketing.com/research.html> Accessed 2009-02-15

<sup>43</sup> Graziano, M. & Raulin, L. (2004)

reclassifications. In addition, this strategy will also evaluate how the reclassification treatments were disclosed for the various bank entities. With regards to constructing regression analysis and studying correlations of relevant variables, the explanatory strategy helps to analyze and conclude the results of this new amendment. The same goes for the association between reclassification of financial assets with, for instance, banks' characteristics. The main motive for us to choose a combination of the two approaches is that the new amendment was applied for the first time in fiscal year 2008, and the disclosure of reclassification produces a new opportunity to test the results of this amendment. In addition, the shift from fair value accounting to amortized cost will also be taken into consideration.

## **3.2 Collection of data**

When gathering data you can differentiate between primary and secondary data. *Primary data* is information that researchers gather first hand, and is adapted to the research that is going to be conducted. This is usually done through interviews, surveys and observations. Data that has been assembled for another purpose, but can still be used for the same or similar research area is *secondary data*. Some examples are journal articles, newsgroups, and books.<sup>44</sup> The research conducted in this paper was based on secondary data, as the purpose was to examine and analyze the impacts brought by reclassification activities. The accounting results and the financial disclosures were obtained from the bank entities annual reports (if provided) or taken from their consolidated financial accounts. Collecting primary data was not required for this paper, but it would have been a good supplementary in getting an insider view of the effects of reclassification.

### **3.2.1 Secondary data of empirical findings**

In order to answer the research questions, selecting and reviewing bank entities from a population was necessary. Banks that were of interest for the paper were entities that had sufficient amount of reclassification information (in regards to assessing certain financial assets at amortized cost), had geographical diversity, and were following IAS/IFRS. As Europe was the designated population, similarities between the countries were categorized to one of the four regions: Northern, Western, Eastern and Southern. The Nordic countries made up *Northern Europe*, and are according to Mattila (1996) signified for their similar political systems and their well-developed Nordic welfare society. *Western Europe* is characterized for its well-developed banking environment whereas *Eastern Europe* for not having a sophisticated banking system. Eastern financial market has been, according to Fink et al. (1998), neglected during and after the communist regime. In addition, the majority of the countries found in the region are of small population. Countries in *Southern Europe* are included in the group code law and are characterized by an association between financial and tax accounting (Shleifer and Vishny, 1997). Furthermore, the EU directives on banking, which was implemented in the 1990's, brought upon stricter regulations for its banks<sup>45</sup>. When the divisions of the regions were done, the next step was to focus on where the bank entities had their main operation. Austrian Erste Group Bank was, for example, originally placed in the Western region, but when we realized that it used the reclassification option only for their

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<sup>44</sup> Andersen, I. (1998) p. 31

<sup>45</sup> IFLR (2009) <http://www.iflr.com/Article/2026917/Regulation-of-Spanish-banks.html> Accessed 2009-05-06

bank in Romania and had its main base in Eastern Europe, it was subsequently placed in that category.

To get the desired banks, we decided to primarily base the sample size on the *Euro Banking Association (EBA)* that consists of 189 European banks. The EBA is a country-neutral banking association that serves as a forum for the European payments industry, and it also plays a significant role in the development of standardized Single Euro Payments Area (SEPA).<sup>46</sup> However, when going through the list we came across some problems with the EBA banks. Various banks did not have the latest quarter or annual reports and some annual reports were in their native language. Our total sample size was 42 banks, and additional banks were needed specifically in the Eastern region due to some of the mentioned problems above. To acquire additional banks, each European country (where possible) were looked into to see if there were other banks that could be used in the sample, and were not part of the EBA. In total we acquired our sample size of 50 banks, and had approximately 12 banks from Eastern, Northern and Southern group. Since we did not have any problems obtaining banks from the Western group, there were 25 banks to choose from; we selected maximum 3 banks from each country provided. The simple random sample was the approach that was used, and implies that each unit in the population had a chance of being selected.<sup>47</sup> Keep in mind that the banks that were not chosen in Western region were also using the reclassification amendment, besides Credit Suisse Group (Switzerland) and Garantibank (Turkey) that were following US GAAP respectively Turkish GAAP. For that reason the selection of the banks in Western group will not affect the analysis that will be conducted in the latter chapters.

### 3.2.2 Collection of theories

According to Bryman and Bell (2007), theories offer indications to researchers as to how they influence the collection of empirical findings. It is therefore important that our theoretical framework contains relevant theories as a foundation for the findings, and give a better understanding of the research problem. The first approach to finding secondary sources available on reclassification, was to decide on what type of information was needed and where it should be obtained from. The amendment documents on this new regulatory change were reviewed to obtain a general understanding of how these changes are regulated and what the additional disclosure requires. Then electronic full-text databases such as Business Source Premier, Science Direct and Emerald were frequently used. In addition, Internet search engine Google Scholar was primarily used to get a hold of journal articles, newsgroups, dissertations, and regulatory documents/discussion papers.

To acquire current and useful information, a few keywords and phrases were formulated to use while searching. Keywords used for the Science Direct database were for example “reclassification”, “fair value accounting”, “historical cost” and “financial instruments”. Furthermore, Deloitte’s IFRS website has been accessed repeatedly to get a comprehensive understanding on certain accounting issues, for instance, fair value accounting on financial assets, and amortized cost of financial assets. The second approach was to evaluate the material to make sure that it was relevant for the chosen area and level of study. For example, are the author(s) credible? Is the material from a trustworthy source? Does the material express a viewpoint that is not backed up? By looking into these matters the *validity* and the *reliability* of the research area will increase. Final approach was to document the searches,

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<sup>46</sup> Euro Banking Association (2008) <http://www.abe-eba.eu/About-EBA-N=EBAAssociation-L=EN.aspx> Accessed 2009-03-14

<sup>47</sup> Bryman & Bell (2007) p. 185

and useful references to provide a correct bibliography at the end of the paper. We are aware that existence of academic research concerning reclassification is limited, and the theories are for that reason of a general nature.

### **3.3 Empirical study methods**

In this section, we explain the ideas and methods that were applied on the collected data and how these approaches helped us to answer the particular research questions. Our intention for this research is to investigate the results of the new reclassification application on certain financial assets. The previous studies do not provide any direct study methods, but similar approaches have been used when looking at banks in particular. It is for that reason we applied these analysis methods for our study purposes.

#### **3.3.1 Comparison analysis**

In financial studies, comparison analysis means comparing and discussing a range of financial figures and outcomes. In our case, the reclassification treatments which are allowed in the new amendment represent the shift from fair value accounting to amortized cost. The direct changes on the valuation, such as changed incomes or equity figures, are all revealed with the application of the new accounting treatment. As our sample banks are from different regions in Europe and have different characteristics, for example, different operations and monetary sizes, all these results can be compared and analyzed under some constructed tables and graphs. Moreover, the comparison can be conducted on the different categories of financial assets that were involved with these reclassifications. When the bank entities followed the additional disclosure requirements of IFRS 7, the accounting value changes, profits or losses without the reclassification, are also included in the annual reports.

According to these different regional groups, the descriptive statistical figures will be used to discuss the following comparative sections below:

1. The sample group that applied the reclassification option and the sample group that did not apply the option.
2. The reclassification circumstances in different regional, operation region or operation type sample groups.
3. The reclassifications of financial assets performed under several different transfer categories, such as “held for trading” to “available for sale”, “held for maturity” to “loans and receivables”, and “available for sale” to “loans and receivables”.

#### **3.3.2 Correlation analysis**

To obtain the empirical findings regarding the relationships of reclassification and other involved factors, the correlation analysis will be one of the main approaches to deal with the secondary data. One of the reliable correlation tests is the *Spearman's rho*, which is commonly used by the accounting researches. As stated by Bryman and Cramer (2007), Spearman's rho is a useful non-parametric method to deal with statistical data. Fewer assumptions are made about variables, and it can be used in a wide variety of contexts. As we have a small bank sample, Spearman's rho can provide us with comprehensible results and less complexity. Firstly, the variable selection in the regression model needs the correlation

results to determine the independence of different variables. This approach helps to study the relationships between the different characteristic variables in order to perform more accurate regression analysis. Secondly, as the disclosures regarding the information of reclassification are evaluated by a self-constructed checklist (more details in the following section), the correlation analysis can be performed on the reclassification figures and evaluated disclosure score. In addition, besides the correlation technique (Spearman's rho, Pearson coefficient), some other common statistical techniques<sup>48</sup> such as T-test, Chi-square and Mann-Whitney U test are also part of analysis approach to explore the reclassification event and different characteristics.

### 3.3.3 Disclosure score checklist

The second research question deals with additional disclosure requirements in IFRS 7.12A. It is intended to permit users of financial statements to determine what would have been the accounting result had the reclassification not been made<sup>49</sup>. It is a well-known fact that the user groups, primarily investors who provide risk capital, want disclosures that provide extra information that they need in order to make an economical decision. When coming across disclosures that provide additional information, as mentioned in section 2.2.5, Cooke (1989) came across noteworthy association between the sizes of the company and how the voluntary disclosures were disclosed. Based on other previous disclosure studies (Beattie et al., 2004; Hassan et al. 2006; Alsaed, 2006), the outcome of the results has mainly been positive between the two factors. In accordance with Hassan et al. (2006) and Alsaed (2006) big entities are better at adopting disclosure practice since they have more resources to produce information for their widespread user groups. Smaller companies might, on the other hand, face a competitive disadvantage as they are generally in the expansion phase. Furthermore, it is also argued that companies audited by larger audit firms provide higher quality financial statements (Becker et al., 1998). In order to reveal further issues on the new disclosure regulations, more practical tests are needed to be done.

In order to evaluate the extent of the banks reclassification disclosure, a simple score checklist was created. The motive of using this checklist is to be systematic when extracting the information from the annual reports. The selection was based on six items, as seen in table 1 below, were every item that a bank had was denoted "1" as in fulfilled, and for items that they did not have "0" as in not fulfilled. Cooke (1989) had also adopted the use of dichotomous procedure in which an item scores one if it was disclosed and zero if it was not disclosed. He also acknowledged that the procedure introduced an element of subjectivity, and for that reason read the entire corporate annual report to minimize this potential bias. This was, in our case, done for the evaluation of the banks reclassification disclosure. Most of the data could be obtained from specific notes on reclassification and in the accounting principles where we looked at the involved categories such as "available for sale" and "held for trading". There were, however, quite few banks that had their data spread out in the annual reports. For instance some information could be extracted from the financial risk and policies chapter. Thus we did the best in following the checklist, and we are aware that it could lead to a marginal error as it was done manually. In regards to item F, in IFRS 7:12A, it contained information regarding both "effective interest rate" and "expected cash flow". So if only one of them were covered in the disclosure, then "0.5" will be assigned to this item.

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<sup>48</sup> These tests are concerned with the differences of value or distribution on particular variables between different sample groups

<sup>49</sup> IFRS 7.12A

The last column denoted “Extra disclosure” is for bank entities that have included other additional reclassification disclosures, besides the six basic ones. It could be for instance extra information in regards to how the reclassification affects the assets, risks and equity (Commerzbank) or mentioning how reclassification affected earnings per share (Dresdner Bank). This information was found by writing the keywords “reclassification” and “reclassified” in the annual reports PDF search engine. As this is an individual appraisal done by us authors, “1” was the score given for additional data. As seen in the used example in table 1, Standard Chartered Bank in the United Kingdom had all six reclassification items and was therefore given “1” per item. They scored an additional “1” point for disclosing the breakdown details in relation to reclassified products. Overall, the maximum score may vary for the various banks, but the average was 6.14 which are the score after meeting all the six required items. It shows an acceptable performance by European banks as this was the first time to apply it.

Item checklist:	
Item A:	The amount reclassified into and out of each category;
Item B:	The carrying amounts and fair values of all financial assets reclassified in the current or previous reporting;
Item C:	Financial asset that has been reclassified based on the "rare circumstances";
Item D:	Fair value gain or loss recognized in profit or loss or in equity (other comprehensive income) for that reporting period and in the previous period;
Item E:	The gains or losses that would have been recognized in profit or loss or equity had they not been reclassified, together with the gains, losses, income and expenses now recognized;
Item F:	The effective interest rate and estimated cash flows the entity expects to recover the date of the reclassification of the financial asset
Extra disclosure:	Other additional disclosure associated with reclassification

Disclosure score checklist in accordance with new paragraph 7.12A								
Bank	Region	Item A	Item B	Item C	Item D	Item E	Item F	Extra disclosure
Ex Standard Chartered	Western	1	1	1	1	1	1	1
Total:								
Percentage:								

Table 1: Disclosure checklist form (self-provided)

The additive model used here is un-weighted, and as Cooke (1989) mentioned each item in the disclosure practice is equally important. This has also been supported by Spero (1979), as cited by Cooke (1989), that found firms being consistent in terms of their disclosure policies. That is if companies are good at disclosing less important items, they will also be good at disclosing important items. Nonetheless, the entities are not required to disclose the six basic items, but as reclassifications are applied for the first time they have tried to make an effort to be informative about their reclassification procedure. This is advantageous for widespread user groups that demand information to be transparent as possible. In a nutshell, the more items that are disclosed in the evaluation checklist the better. In regards to calculating, the calculation is done by using the total disclosure score model as illustrated below:

$$\text{Total disclosure score (D)} = r_1 + r_2 + r_3 \dots + r_6 \dots + r_{n-1} + r_n \quad (1)$$

where;

$r$  = each disclosure requirement fulfilled or not

$r_{n-1}$  ,  $r_n$  = the extra disclosed information

### 3.3.4 Regression analysis

Beside the comparison and correlation analysis between the reclassification amounts and some of the mentioned influential figures, two different types of regression analysis (*logistic regression* and *linear regression*) will be applied to perform on the data about the characteristics of different bank samples. The logistic regression will be used for the study of the relationship of reclassification event (whether to apply the amendment or not) and bank characteristics. The linear regression is applied for the analysis to show how the disclosure level on reclassification activities is associated with different indicators. To set up the model, the selection and evaluation of variables are crucial. The linear regression of disclosure is less complicated, however since there is no example to refer for the logistic model on reclassification. Then we explored some related researches on empirical studies of banks or cross-comparison of banks from different regions. The prior literatures (Beaver et al., 1989; Barth, 1991; and Barth et al., 1996) applied the cross-sectional regression model on fair value accounting of financial instruments and that was also the case for the comparison papers conducted by Benzion Barlev et al. (2007) and Santiago Carbó et al. (2008). They had sampled banks from different regions. Within this model, some of the mentioned variables will be included, such as the business type of sample bank; the monetary size and geographic regions.

### 3.3.5 The variable selection

Firstly, some basic bank characteristics are considered and taken into the discussion and regression analysis. Since the bank samples are from different geographic regions and operating in several different financial businesses, the basic variables can be selected based on these facts, which differentiae the bank entities. These basic variables include bank size (total assets), operation type, regions (geographically) and operation region (the banks' operation scale). Other variables that were brought in the regression model are financial ratios based on the annual reports of banks. The financial ratios have been used by financial market participants and managers of entities to evaluate and anticipate the financial positions of firms. The ratios are usually used for comparison purposes within each entity or between entities, however in our case, and similar to other previous studies by for instance Kosmidou et al. (2006) and Santiago Carbó et al. (2008), the ratios are indicators that represent the competitive position and financial status of the bank samples. By evaluating the firm's performance, these ratios demonstrate the banks' strengths and weaknesses from different perspectives.

The previous studies that evaluate the performance of banks or financial institutions have always considered the profitability and cost efficiency ratios. Additionally, it has been indicated that the risks that the banks are exposed to heavily affect their profitability. When the market was stable and less risky, the banks were able to increase profitability by taking excessive risks<sup>50</sup>. Many financial institutions at the beginning of current crisis had a similar approach, and relevant problems emerged when doubtful loan or speculative investment could not be paid back. Golin (2002) argues that the challenge for bank management is to minimize the risk of loan defaults and to price loans so that returns are more sufficient to cover loan losses. It makes sense that our study includes the indicators such as loan loss provision that measures risks and liquidity.

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<sup>50</sup> Golin, J. (2002)

In general, the included financial ratios or indicators represent the competition positions of bank samples. This is also consistent with the idea of reclassifying financial assets which reconstructs the firms' financial position and performance. The following financial variables will be defined and all the variables are represented in a summary table:

**Leverage ratio:** the ratios used to demonstrate the financial leverage of a company and measure its ability to meet financial obligations. For example: Debt/Equity Ratio.

**Capital adequacy ratio (CAR):** the ratio of a bank's capital to its weighted risk assets and it complies with the Basel capital requirement. In this case, we took the total capital ratio, including tier 1 and tier 2. Capital ratio is a type of solvency ratio that measure banks' ability to meet debt obligations. Tier 1 core capital ratio was not chosen as some banks had adopted BIS II Regulation<sup>51</sup> which was introduced June 2008. The new regulation rules allows bank entities to raise more obligatory capital which increase the capital ratio.

**Return on equity (ROE):** The amount of net income divided by shareholders equity.

**Loan Loss Provisions (LLP):** An expense set aside as an allowance for bad loans (customer defaults, or terms of a loan have to be renegotiated). LLPs are expected to reflect anticipated losses by bank managers<sup>52</sup>.

Selected variables (non-financial and financial)	Definitions
Region (R)	1-Northern; 2-Western; 3-Sorthern; 4-Eastern
Operation type (OT)	0-Traditional financial services; 1-Include investment banking and insurance
Operation region (OR)	0-Regional wide; 1-European wide
Bank size (TA)	Total assets
Leverage ratio (D/E)	Debt/Equity ratio
Capital adequacy ratio (CAR)	Total capital ratio
Profitability ratio (ROE)	Return on equity
LLP/TA	Loan Loss Provisions/Total Assets

Table 2: Summary of the selected variables

There is no doubt that many other ratios could have been used. However, an effort was made to make use of well-known ratios, based on previous studies to keep the amount of variable manageable.

### 3.3.6 Logistic regression

Based on the fact that the reclassification is a special type of accounting choice, the logistic regression can be performed to carry out the multivariate analysis of the banks samples. Logistic regression is part of a category of statistical models called generalized linear models<sup>53</sup>, which is a widely used statistical technique, with numerous applications in banking, finance and accounting.<sup>54</sup> Usually it is used for predicting the possibility of occurrence of

<sup>51</sup> The Bank for International Settlements (BIS) published recommendations/principles regarding the banks liquidity risk management and supervision. BIS (2009) <http://www.bis.org/about/index.htm> Accessed 2009-05-18

<sup>52</sup> Bank of Finland Research (2006) <http://www.bof.fi/NR/rdonlyres/9DDA3E6F-B4A4-4227-8100-664AEF8B01DE/0/0623netti.pdf> Accessed 2009-04-30

<sup>53</sup> SFSU (2000) <http://userwww.sfsu.edu/~efc/classes/biol710/logistic/logisticreg.htm> Accessed 2009-03-15

<sup>54</sup> Kosmidou, K. (2004) p. 190

certain events, and as other forms of multi-regression models, this model is involved with a set of different variables that are either numeric or non-numeric. In this case, the event will be the entities decided to apply the option to reclassify the certain financial assets or not, but instead of acquiring the accurate prediction model, the purpose of this application is more about how to evaluate the relationship of the reclassification with these variables and how the two groups (applied or not) differ from each other.

In our study, the model is developed using as dependent variable to describe the reclassification choice made by different bank ( $y=1$  for the banks applied the reclassification option and  $y=0$  for the banks that did not apply the option), whereas the independent variables include the selected financial ratios and non-financial characteristics.

The general logistic model has the form: 
$$P(1=1|x) = \frac{\exp(b_0 + b^T x)}{1 + \exp(b_0 + b^T x)}, \quad (2)$$

Where;  $P(1=1|x)$  is the conditional probability that a bank  $x$  applies the reclassification option,  $b_0$  is the constant term and  $b$  is the vector of regression coefficients for the independent variables. The development of the model is based on maximum likelihood techniques using a backward stepwise procedure for variable selection.

The details of this model (includes all mentioned variables) can be also illustrated as follow:

$$R = \beta_0 + \beta_1 OP + \beta_2 TA + \beta_3 RG + \beta_4 OR + \beta_5 LER + \beta_6 CAR + \beta_7 LLP/TA + \beta_8 ROE + \dots \quad (3)$$

Where;

**R** is the dependent variable for the event of reclassification.  $\beta_1, \beta_2, \beta_3,$  and so forth are the regression coefficients of different variables.

**OP** represents business type for our bank samples. The banks identified are involved with either general financial services or a multi business including investment banking, insurance and asset investments.

**SI** represents business sizes, and the values here are the total assets of bank entities.

**RG** stands for the regions which are Northern Europe, Eastern Europe, Southern Europe and Western Europe. The similarities with regards to the regional operations were also looked into.

**OR** another scale factor which denotes whether the bank entities are operating regional or European-wide (European-wide also include banks that are operating globally).

**LER** and **CAR** stands for leverage ratio (D/E ratio) and capital adequacy ratio.

**LLP/TA** is Loan Loss Provisions/Total Assets.

However, due to the fact that we had limited sample size, the result of the whole regression might be inefficient and insignificant. In the analysis section, different variable sets and different model combinations will be tested in order to obtain more valuable results. This rule is also applied to the following linear regression model.

### 3.3.7 The method to analyze the relationship of disclosure and bank's characteristics

Another multi-regression model can be applied when investigating the relationship of the disclosure regarding the new reclassification and bank characteristics. The bank characteristics are the same that were applied in the first logistic model. In addition, the association of the variables with the disclosure level is taken into consideration. For instance, some of previous studies showed that the size of company has a positive association with its disclosure level. It seems that larger bank entities are likely to make more voluntary disclosure since they have more professionals and lower cost to collect relevant information, as well as great demand from external users<sup>55</sup>. The leverage level is also considered to be relevant incorporated with the disclosure level. A reason is the long-term creditors that require more information from companies to control the risks. It makes sense that companies with higher profitability have intentions to disclose more accounting information to attract potential investors<sup>56</sup> and reassure current investors. Something that needs to be pointed out is the bank industry is highly regulated and has more requirements from both investors and oversight entities (e.g. Basel II). Moreover, the application of reclassification is rather new to both banks and their professionals. The results of the statistical analysis might be different from the studies in other industries and existing results/conclusion.

The model (includes all the mentioned variables) can be illustrated as follows:

$$DiscS = \beta_0 + \beta_1 OP + \beta_2 TA + \beta_3 RG + \beta_4 OR + \beta_5 LER + \beta_6 CAR + \beta_7 LLP / TA + \beta_8 ROE \quad (4)$$

Where; **DiscS** is the dependent variable for the level of disclosure with regards to reclassification.  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ , and so on are the regression coefficients of different variables.

### 3.4 Reliability and validity

When conducting a research, a prominent concern is reducing the risk of measurement errors. Two criteria's that are used for evaluation of research are reliability and validity. *Reliability*, according to Bryman and Bell (2007), is concerned with the question of whether the results of a study are repeatable and consistent if it were to be conducted by other researchers. As our study consisted of secondary data, it was important for the gathered information to be taken from trustworthy sources. The new amendment to IAS 39 and IFRS 7 is regulated by law, and the use of bank entities annual reports were expected to be reliable as they were audited by the Big Four auditing firms before the annual reports were released. However, since the annual reports are individually designed there is a possibility that some information could be missed out. To overcome this problem Reuter's website was used to get market data such as LLP ratios or getting an overview of the most important posts in the bank's financial statements. Furthermore, the data was double-checked by the authors, and we had a consistent data collection procedure were the information was documented in Excel. The same currency, Euro, was used to smooth the progress of comparison as the researched banks were from different regions in Europe. The exchange rates were quoted from European Central Bank (ECB)<sup>57</sup> from the year end of 2008. By having this approach, it would increase the level of

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<sup>55</sup> Hossain et al. (1995)

<sup>56</sup> Meek et al. (1995)

<sup>57</sup> ECB (2009) <http://www.ecb.int/stats/exchange/eurofxref/html/index.en.html> Accessed 2009-04-29

reliability in the paper, and for other researchers to come up with similar results and conclusion.

A further and also the most important criterion of research is *validity*. As mentioned by Bryman and Bell (2007) validity is concerned with the ability to correctly measure the collected data it aims to measure. In regards to our paper a majority of our secondary data stemmed from journal articles, dissertations, and previous studies that were used to build up the structure of the introduction, theoretical framework, as well as the methodology chapter. To obtain the empirical data it was taken from the researched banks annual reports, as this would be the starting point for our discussion in addition to our analysis. However, to acquire findings regarding the relationships of reclassification and other involved factors, the *comparison analysis*, the *correlation analysis*, self-constructed regression analysis models (*logistic regression* and *linear regression*) would be our main approaches to deal with the secondary data. The common denominator between the four approaches is that they are frequently used in accounting researches, and have been used for similar research involving banks as mentioned in section 3.3. We are aware that the use of secondary data can lead to answers that do not match our research questions, but as stated by Saunders et al. (2003) it is important for the researches to appraise the validity of the information that they have come across. Then from there make their own decisions on what approach is more relevant and reliable for the research that they are about to conduct. Nonetheless, judgment is of subjective incentive and can pose some difficulties for validity. To reduce a weak validity due to an incomplete method, we believe that using the four mentioned procedures/models will provide not only comprehensible and relevant results, but also enhance the validity of the paper.

### **3.5 Criticism of the chosen method**

When using a quantitative approach, an issue that is of concern is whether the findings can be generalized beyond the researched bank entities that make up the sample. Bryman & Bell (2007) mentioned that “*there is always the possibility that sampling error (difference between the population and the sample that you have selected) has occurred. If that is the case, the sample will be unrepresentative for the wider population.*”<sup>58</sup> Our sample size of 50 European banks is not large, and we cannot be so sure that a finding based within this sample will also be found in the population. In a nutshell, the bigger the sample pools the more reliable the outcome would be.

Since the banks reclassification disclosure was gathered through a simple score checklist, the dichotomous procedure has an element of subjectivity. As cited by Cooke (1989) the entire annual report should be read to minimize this potential bias. Bear in mind that the majority of the financial reports were extensive and there was a risk that some data could have been interpreted the wrong way or even be missed. Thus we did the best in following the checklist, and we are aware that it could lead to a marginal error as it was done manually. When choosing the non-financial and financial variables for the models that were employed in this paper, we looked at prior studies to see how the researchers had reasoned for their variable selection. Having that as our basis, we made our own judgment (which is subjective) whether the variables were appropriate for our study or not. A similar procedure was conducted when selecting the 50 banks in our sample, as we did not have access to the database BankScope.

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<sup>58</sup> Bryman & Bell (2007) p. 367

## 4. Findings and discussion regarding the application of reclassification

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*In order to find out what impacts have been brought by the new reclassification of financial assets, relevant findings extracted from the researched banks annual reports of 2008 will be presented and discussed in this part of the chapter. To make the findings clearer, constructed tables, graphs and discussion have been added where necessary. All the currency units are in Million Euros, if listed otherwise.*

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### 4.1 Sample description<sup>59</sup>

As our researched units are from different regions in Europe, the use of the same currency Euro was needed to facilitate comparison. The exchange rates for each sample bank were quoted from the foreign exchange rate used by European Central Bank (ECB)<sup>60</sup>, and their reference rates are based on the daily procedure between central banks within and outside the European System of Central banks. One bank in the sample, the Icelandic MP Investment bank, used their local currency (ISK) that could not be retrieved by ECB. The exchange rate provided by Titi Tudorancea<sup>61</sup> was then used. All reference rates were taken from the fiscal year end of 2008.

Before getting acquainted with the coming sections, it is good to know that the banks sector type was categorized into “*general business*” and “*multi business*”. Banks included in the general business segment had ordinary financial services including, for instance, deposit-taking institutions and making loans. Banks operating in a multi business were more involved in the financial market, and not only operating within traditional business segment. The researched entities had, for example, incorporated investment banking, asset investments and insurance into their operation type. Julius Bär Holding, a Swiss private bank, was an exception in the sample. Not only did they invest money for the wealthy, but their sector operation belonged to the investment business with high risk. It was for that purpose the bank was put under multi business as it had a more aggressive banking business. Nonetheless, for all four regional groups the findings varied. As demonstrated in table 2 Eastern and Northern group had 7 banks respectively operating within general business. Not only was this a high number in the category, but their business sector was mainly confined region-wide. In contrast to Eastern and Northern group, Southern and Western had more banks that were categorized as multi business. Southern had 7 banks working in a multi business whereas Western group had 13 banks. A dissimilarity that was indicated was that the banks in the Southern region were mainly operating on a regional level while the banks in the Western group were mainly operating European-wide. A motive could be the EU directives on banking that were implemented in the 1990’s, which brought upon stricter regulations for its banks situated in the Southern region<sup>62</sup>.

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<sup>59</sup> The full sample size in appendix 1

<sup>60</sup> ECB (2009) <http://www.ecb.int/stats/exchange/eurofxref/html/index.en.html> Accessed 2009-04-29

<sup>61</sup> Tuti Tudorancea (2009) [http://www.titudorancea.com/z/eur\\_to\\_isk\\_icelandic\\_krona\\_euro\\_official\\_exchange\\_rates.htm](http://www.titudorancea.com/z/eur_to_isk_icelandic_krona_euro_official_exchange_rates.htm) Accessed 2009-04-29

<sup>62</sup> IFLR (2009) <http://www.iflr.com/Article/2026917/Regulation-of-Spanish-banks.html> Accessed 2009-05-06

	General business	Multi business	Regional-wide	European-wide
Eastern region	7	3	10	0
Northern region	7	5	12	0
Southern region	3	10	11	2
Western region	3	12	4	11
Total	20	30	37	13

**Table 3:** An overview of the banks “operation type” and “operation region”

Another factor that has been considered is the researched bank’s financial performance, which is *profit*. Southern region had the highest total profit followed by Northern and Eastern region (as seen in table 3 below). Western region, on the other hand, made a loss of €19445m and as Golin (2002) mentioned, the risks that the banks are exposed to affect their profitability immensely. If the financial market were more stable and less turbulent, the region would have had a higher profitability, as well as taken on more risks. In contrast to Western region’s total profit, their total asset was very high in comparison to the other three groups. A reasonable explanation is that the banks (e.g. Deutsche Bank, Barclays Bank, HSBC etc.) in the region are the largest firms in the sample. Southern and Northern group followed with respectively €3387342m and €1660029m. Their total asset were not close to Western’s total asset amount, but the indicator that we got for both regions is that the majority of the banks are of medium-sized character. The lowest level was found in Eastern group, and as cited by Fink et al. (1998) Eastern financial market was neglected during and a couple years after the communist regime. Moreover, the countries found in the region have a small population and a low level of GDP per capita. Despite these issues, the Eastern region is still an emerging market, along with the bank entities found in the group.

EUR m	Eastern	Northern	Southern	Western
Total profit	2953,67	7242,08	12914,6	-19444,83
Total asset	258127	1660029,45	3387342	13604505,19

EUR m	Minimum	Maximum	Mean
Total profit	1,48	6712,1	916,38

**Table 4:** A summary of the four regions total profit, and total asset

## 4.2 Application of the reclassification amendment

As mentioned in the methodology chapter, we had 50 banks in our sample and the idea was to see to what extent the researched banks in Europe had applied the new amendment to IAS 39. The entities that had applied the reclassification amendment were 70 percent (35), and the remaining 30 percent (15) did not choose the option to reclassify. Furthermore, when going through the research 2 banks had used reclassifications allowed by the previous standard. Storebrand had reclassified from “held to maturity” to “available for sale”, while BZWBK had reclassified from “available for sale” to “held to maturity”. Alpha Bank and Piraeus Bank had partially reclassified some of its financial assets to “available for sale” to “held to maturity”, but for the most part they had reclassified its financial assets using the new amendment. They were for that reason put into the category of the bank entities that had applied the reclassification amendment. The effects of their reclassification will not be discussed in this paper, and this section will focus on the 35 researched banks in our sample.

The purpose for the new amendment was to enable bank entities to record its financial assets at amortized costs instead of market-to-market values. The research showed that the usage of the new reclassification amendment was high in Western and Southern region, also seen in figure 6, and a motive could be the apparent results that showed on the profits as the reclassification stabilizes the operation results, and avoids further losses. This is beneficial for entities that operate on a market-wide scale as their financial assets portfolio will be subjected to various financial risks. For instance, Deutsche Bank from the Western group were not only the first big financial institution to adopt the new reclassification procedure, but by re-categorizing €24.9bn (\$31.2bn) of its loan exposure it brought upon a positive impact on their net income.<sup>63</sup> In regards to the bank entities in Northern and in particular Eastern region, the application of the reclassification was very low. They had been exposed to a relatively small profit change, and an explanation could be that their financial assets portfolios were less exposed to the inactive market.

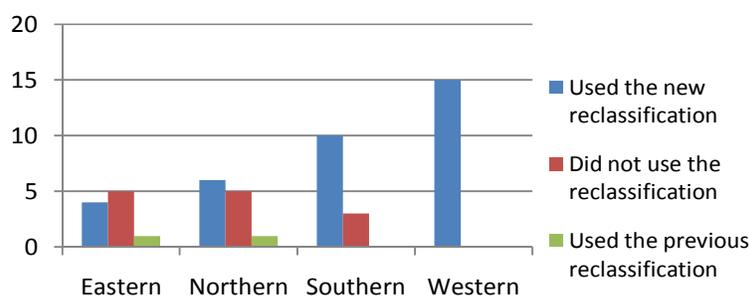


Figure 6: Usage of the reclassification amendment

Nonetheless, the application of the new reclassification amendment became more noticeable when looking at the banks *operation region* as a whole. The research showed that more than 58 percent (21) of the researched entities had applied the new option *regional wide*, which was the opposite for *European-wide* were all the banks (14) had applied the new amendment. Western group, for instance, stood for 86 percent (12) of the researched banks that had used the new option European-wide and even internationally.<sup>64</sup> As mentioned by Uhde and Heimeshoff (2009) the size of a bank allows expansion across multiple geographic markets and business lines in order to become a more versatile corporation. It is understandable that the high usage of the recent amendment would help the Western banks with the different accounting valuations, as it would potentially reduce reclassification losses. Southern region constituted almost 77 percent (10) of the banks that had applied the new option on a regional level. It was also the highest amount of the four regions.

With regards to the banks *operation type* 71 percent (22) of the banks had a *multi business* which had used the new reclassification procedure, while 68 percent (13) of the banks had a *general business*.<sup>65</sup> Beside the distinctive fact that the new amendment was low in both Eastern and Northern region, their operation type was primarily of a more traditional business with lower risk level. The Eastern group had, for instance, no entities with multi business that had used the new reclassification procedure. This was different for Northern group that had 3 banks operating on a multi level and had also made use of the reclassification procedure. The Western and Southern banks had yet again a high usage of employing the reclassification

<sup>63</sup> Freshfields Bruckhaus Deringer (2009) <http://www.freshfields.com/publications/pdfs/2009/jan09/24930.pdf> Accessed 2009-02-11

<sup>64</sup> See appendix 2

<sup>65</sup> See appendix 2

procedure in their multi business. Both groups are operating in a competitive environment as a result to their well-developed banking system which is stable. On the whole, the reclassification findings showed that the two operation types, did not affect the usage of the recent amendments in any way as they both had approximately 70 percent.

#### 4.2.1 Reclassification using the four reclassification forms

In our sample pool there were a total of six different reclassification forms that were used in our bank sample. They were as follows:

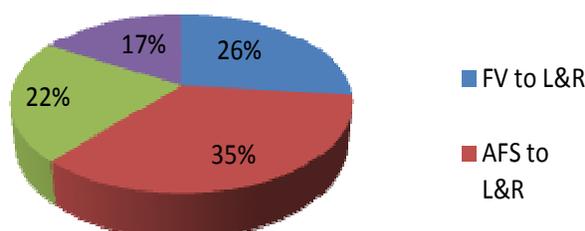


**Figure 7:** An illustration of the six reclassification forms in the sample pool (self-provided)

The first four (in green) are newly permitted by IAS 39 and the other two (in red) are already permitted by the previous standard. The first four reclassifications forms will be looked into, as the purpose of the thesis is to look at the new amendment to the standard. When going through the research, it was evident that the majority of the banks concerned had transferred their financial assets using one reclassification form. The banks concerned constituted 55 percent. However, there were entities that had transferred their financial assets using more than one reclassification form. The study showed that 21 percent of the banks had reclassified its financial assets to, and from three of the reclassification forms. Moreover, Handelsbanken and National Bank of Greece had reclassified to and from all four reclassification forms which were also the maximum (see appendix 3).

At the time of reclassification the assets were valued and recognized at fair value. When entities were given the option to use one (or more) of the newly permitted reclassification forms as from July 2008, it was the starting point for amortized cost. The general purpose was to reflect the entities intention with their financial instruments by putting emphasis on *reliability*. As mentioned in the theoretical framework, many advocates of fair value accounting believe that measuring financial instruments at historical cost does not always provide relevant information for users. One criticism that Benston (2006) and Penman (2007) mentioned was that historical costs are normally out of date. However, this changed when the financial crisis started to spread rapidly from year 2007. The need for reliable data was a necessity as the various user groups, primarily investors who provide risk capital, need it in order to make an economical decision.

As stated in the new amendment, the non-derivative financial assets under held for trading (fair value) can be reclassified into available for sale or held to maturity when exposed to rare circumstances. Out of 35 banks, 22 percent (13) of the sample size had reclassified its financial assets under “*held for trading*” to “*available for sale*”, whereas 17 percent (10) had reclassified its financial assets from “*held for trading*” to “*held to maturity*”. The bank entities that transferred their financial assets out of “*available for sale*” into “*loans and receivables*” were 34 percent (21) and 27 percent (16) had reclassified from “*held for trading*” to “*loans and receivables*”. The two last reclassification forms could be achieved when available for sale and held for trading met the definition of loans and receivables. The results have been demonstrated in figure 8 below:



**Figure 8:** An overview of the four reclassification forms

As shown in figure 8, the high score of 34 percent denotes that reclassifying financial assets out of “*available for sale*” to “*loans and receivables*” was the most popular and accepted form of reclassification. The largest amount reclassified from available for sale to loans and receivables was done by COBA, in Western group, with a staggering €77bn. The banks that followed, Bayerische Landesbank and Deutsche Postbank, were also from the same region and had reclassified €39bn respectively €34.8bn. This has resulted in positive effects on their shareholder equity as seen in section 4.2.3. Southern group had also many bank entities that had applied this reclassification type, but their reclassification amount was not anywhere near Western group. The largest amount that was reclassified from available for sale to loans and receivables was done by Intesa Sanpaolo with €6002m. In Northern and Eastern region, the usage of the reclassification form was low as most of the banks did not use the new reclassification amendment. However in Northern group, SEB had reclassified €8486m out of available for sale to loans and receivables which was a larger amount than Intesa Sanpaolo in Southern group. Nonetheless, the necessity of using this form of reclassification (that is measured at amortized cost); is having the opportunity to hold their financial assets for the foreseeable future. What IASB defines as “foreseeable future” is on the other hand not stated.

Banks that were located in Northern and Southern region used the opportunity to change their financial assets from “*held for trading*” to “*held to maturity*”. However, as seen in figure 8 above it was the least used classification and constituted 17 percent. The banks in Western group had for instance not used this form of reclassification at all, while in Eastern region one entity, Medicinos Bank, had reclassified €1m which was also the lowest amount in the category. By using this form of reclassification the entity has the ability to hold the financial assets until maturity. However, if they decide to sell the securities due to, for example, volatility in the market it could ruin their entire held-to-maturity portfolio. In addition, it would require the entity to be fair valued through equity for the next two annual reporting

periods.<sup>66</sup> Overall, held-to-maturity assets are assets held with no intention to sell in the short term.

As stated in the amendment, the non-derivative financial assets under “*held for trading*” can be reclassified into “*available for sale*” when exposed to rare circumstances. The IASB defined a rare circumstance as something unusual and unlikely to recur in the near term. In regards to our sample pool, all region groups used this form of reclassification, apart from Eastern group. The largest amount reclassified was done by Danske Bank in Northern group with €15705m, and the lowest amount done by Julius Bär Holding with €43m in Western group. In addition, when the financial assets under held for trading are transferred, the avoided value losses affect the entities profits directly. When the assets are transferred to available for sale, the shareholder’s equity will receive a positive or negative impact. In our empirical research it was generally positive as seen in section 4.2.3. “*Held for trading*” to “*loans and receivables*” was another reclassification form that was well accepted. It constituted 27 percent, and was used by all the regions in the sample. Dresdner Bank and Groupe Caisse d’Epargne from Western region had the largest amount of reclassification with €1.5bn and €1.4bn respectively.

On the whole, we can see that the researched banks in Southern and Western group made use of the four different forms of reclassifications as it would help them with the various accounting valuations that would decrease valuation losses. This would then result in positive outcome on their profit, equity or even both categories. The entities that had used the new reclassification in the Northern group were a bit active, but as their business sector was of a more traditional character it was not in the same level playing field as Southern and Western group. That was the case for Eastern group as well as they had the lowest amount of reclassifications in all four regions. Bear in mind that only four Eastern banks applied the reclassification option, and three entities had their annual reports evaluated.

#### **4.2.2 Reclassification amounts compared to total amount in each category**

By paying attention to the four reclassification forms in section 4.4.1, the findings showed that most of the bank entities used the option to reclassify from the category “*available for sale*” to “*loans and receivables*” (that made up 35 percent). The study also focused on how big/small the proportion change was on the reclassification amount, as a result of the four reclassification forms. It was noticeable that the changes were significant for many of the researched banks (35), whether they had a small or a large reclassification amount. When Medicinos Bank reclassified €1m of its financial assets from “held for trading” to “held to maturity”, you would firstly assume by the small amount that the reclassification impact was comparatively low. However, the percentage of “held for trading” reclassified to “held to maturity” was a staggering 44 percent which is a significant proportion when looking at how much was reclassified. On the other hand, the reclassified amount within its current category, held to maturity for the year 2008, was not significant as it was almost 2 percent. Commerzbank had the highest reclassification amount of €77bn which was reclassified from “available for sale” to “loans and receivables”. The amount of “available for sale” reclassified to “loans and receivables” was also significant as the amount constituted 65 percent. In addition the reclassification within its current category, loans and receivables for 2008, were

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<sup>66</sup> KPMG (2008) <http://www.kpmg.com.au/Portals/0/08FR-49.pdf> Accessed 2009-02-13

approximately 92 percent which was very high. Loans and receivables are generally a huge post in a company's balance sheet, but another contributing factor could be that they had reclassified €32bn of its financial assets in November.

Banks	Rec. amount	FV to HTM	AFS to L&R	FA through P&L (2008)	AFS (2008)	HFM (2008)	L&R (2008)
Medicinos Bank	1	1		1,27		63,80	
Commerzbank	77000,00		45 (Sep) + 32 (Nov)		41534,00		83563,00

**Figure 9:** Details on reclassification amount for Medicinos Bank and Commerzbank

Another interesting observation that was made, from the researched banks in the sample, was that the percentage shown on the reclassification amount had no association with the banks *operation region* or their *size*. The three Eastern banks had all made a significant proportion even though the banks are small market players. Moreover, the group had also reclassified the least reclassification amount in the sample apart from Alpha Bank (Southern Europe) that had reclassified €21,8m and Julius Bär Holding (Western Europe) that had reclassified €42,36m. The results from the Western group were, on the other hand, a bit diverse. Barclays Bank had for instance reclassified more than €4bn of its financial assets from “held for trading” to “loans and receivables”, but a change of 2 percent happened due to the reclassification form. Even though the amount was not of a significant proportion, Barclays Bank had applied the reclassification procedure the 16<sup>th</sup> of December. So the effects of the reclassification form cannot be quite seen in two weeks alone, and be incorporated in the results of 2008.<sup>67</sup> Deutsche Bank had reclassified €34,4bn of its financial assets of which €10,8bn were reclassified from “available for sale” to “loans and receivables”. Due to the reclassification form, a significant proportion of 81 percent was made.<sup>68</sup> Moreover, it resulted in Deutsche Bank to avoid losses that amounted to 58 percent for the 2008 results (see section 4.2.3). Overall, the Western group had the highest amount of reclassification, but the four reclassification forms had different outcomes for the bank entities concerned. As exemplified Barclays Bank had a change of only 2 percent, whereas Deutsche Bank had a change of 81 percent.

Banks found in Northern and Southern group were also diverse, in particularly the latter group. Northern banks had on the other hand a more consistent proportion change on the reclassification amount, caused by the reclassification forms. When Handelsbanken reclassified €2357m of its financial assets from “held for trading” to “held to maturity”, “available for sale” and “loans and receivables” a change of almost 65 percent happened which was significant when compared to the amount of reclassification that was reclassified. The Northern banks may not be on the same level playing field as Southern or Western, but most of the proportion changes were fairly high in comparison to the reclassification amount as demonstrated in the appendix 3. To give a brief overview of the total reclassification amount per region, table 5 below has been added:

	FV to HTM	FV to AFS	FV to L&R	AFS to L&R
<b>Eastern</b>	1	0	36,5	52,43
<b>Northern</b>	10375.8	15942.7	1663.5	10304
<b>Southern</b>	1765.85	3598.1	25177.74	15528.9
<b>Western</b>	0	4796.01	285668.56	279237.43
<b>Total</b>	12142.65	24336.81	312546.3	305122.76

**Table 5:** An overview of the total reclassification amount reclassified per region

<sup>67</sup> See appendix 3

<sup>68</sup> See appendix 3

### **4.2.3 Impacts of reclassifications on profit and shareholder equity**

Beside the categories transfers and the changes on accounting treatments (e.g. relevant valuation approaches from fair value to amortized cost), the most significant adjustments on the results of 2008 brought by the reclassification actions are avoided profit losses/fair value losses, and the changes on revaluation reserves, which directly contribute to shareholder equity. Generally, if the banks made appropriate choices and reclassified financial assets, that are not only traded less actively but expected to have a lower value in the following period, the reclassifications of these financial assets will avoid further profit losses or prevent further unrealized valuation losses in the revaluation reserve (equity change). On the other hand, banks might make inaccurate prediction which leads to the reclassified assets to have higher fair value after the reclassification date. In this case, the entities seemed to have missed out the opportunity to take advantage of the new amendment.

When the financial assets under held for trading are transferred, the avoided value losses affect the profits of entities directly, and if the assets from available for sale are also involved, the shareholder's equity will receive either a positive or negative impact, mainly positive. The banks in the sample that had applied the new amendment (35), 27 of them had their profits affected and 23 banks had equity changes due to the reclassification. It was only KBC bank that had no actual impacts on either their profit or equity in the fiscal year of 2008. An explanation could be that their reclassification was recorded at the end of December. This will then instead affect the results of 2009. Another two examples are Rietuma Bank (Eastern Europe) and Swedbank (Northern Europe). Their reclassifications, unlike the choices of other sample banks, had negative effects on the financial results (on the second half fiscal year), because of the increasing value on reclassified assets, €1.63m and €56.46m respectively. The rest of the sample entities avoided further losses and received positive consequences on profit, equity or both.

As stated in the summary table (appendix 4), Deutsche Bank and UBS AG avoided the most amount of fair value losses through income, both around €3bn, and they were followed by HSBC (€2.5bn) and UniCredit Group (€2.36bn). Although two biggest figures are from Western Group, 6 of 15 banks are not affected through profit. However, with reclassification amounts of €12bn and €1.5bn from held for trading to loan and receivable, Credit Agricole and Dresdner Bank also experienced some significant profit changes, €489m and €671m respectively. Another exceptional case is Barclays Bank, over €4bn financial assets were reclassified, and only €1.56m profit change happened because of the reclassification. The reason for that is the reclassification of Barclays bank was applied in mid December and the effects of revaluation have not really taken part in the 2008's results. We can expect a significant effect in the 2009 financial accounts. A similar situation happened to Standard Chartered Bank that had a high reclassification but low profit effect (€73.4m). The reason was, however, different in this case, as the changes brought by reclassification were more focused on revaluation reserve (€295m in the equity part).

All four eastern samples are exposed to the profit changes with relatively small influence, but as mentioned earlier Rietuma Bank is one of two banks that encountered increasing fair value (€1.6m). On the other hand, most of the bank entities in Sothern and Northern groups benefited from the positive effects on profit accounts (apart from Swedbank, Alpha Bank and EFG Eurobank). The ranges of their avoided valuation losses through profit are also quite diversified: in the Northern group (besides Swedbank) it was from €42.42m to €309.54m; in the Southern group (except Alpha Bank and EFG Eurobank) from €5.6m to €2365m. Below is

a table showing the breakdown of the effects on profits according to the different ranges (in million) and region in order to illustrate how many bank entities fall into a particular range.

	Negative effect	No effect	1-100	101-200	201-400	401-1000	1000+
<b>EE (4 banks in total)</b>	1	0	3	0	0	0	0
<b>WE (15 banks in total)</b>	0	6	3	1	0	2	3
<b>NE (6 banks in total)</b>	1	0	2	1	2	0	0
<b>SE (10 banks in total)</b>	1	2	5	0	0	2	1
<b>Total</b>	3	8	13	2	2	4	4

**Table 6:** The amount of valuation losses change through profit in ranges (Million Euros)

When looking at the effects on shareholder equity, the unrealized fair value losses (revaluation reserves in particular) becomes a bit complicated. The avoided valuation losses through profit are more straightforward. The changes on revaluation reserves are entwined with the positive impact of reclassification from “available for sale” to other categories and the negative impact of reclassification from “held for trading” to “available for sale”. Since more entities prefer to avoid further write-downs that affect profit, fewer bank samples experienced the equity changes brought by the reclassification (14 out of 35 banks had no effects on equity). Among all the involved samples, Deutsche Bank was ranked number 1 again with €2009m that would be included in unrealized fair value losses if there was no reclassification. It was followed by Bayerische Landesbank with €1200m and Groupe Caisse d'Epargne with €646m. Both banks reclassified huge amounts of assets from “available for sale” to “loans and receivables”. One unique case was the bank Commerzbank, which had reclassified €77bn, which was the largest amount from “available for sale” to “loans and receivables”. The unrealized fair value losses were reduced by a relatively small amount of €200m. A reason might be €32bn of these reclassified assets was transferred in November, and this leads to the avoided losses on this part of financial assets to be only accounted from November.

The following table is an illustration of the effects on equity (unrealized fair value losses/revaluation reserves) according to different ranges (in million) and regions and the description of how many bank samples are included in each effect range.

	Negative effect	No effect	1-50	51-100	101-300	301-600	600+
<b>EE(4 banks in total)</b>	0	3	1	0	0	0	0
<b>WE (15 in total)</b>	1	6	1	1	3	0	3
<b>NE (6 in total)</b>	1	3	0	0	1	1	0
<b>SE (10 in total)</b>	3	0	4	0	1	1	1
<b>Total</b>	5	12	6	1	5	2	4

**Table 7:** The amount of value changes through shareholder equity (Million Euros)

As shown in the table above and in the summary table in appendix 4, the Western group is once again the most diversified, and included 6 out of 15 banks that had no effect. One bank had a negative result and three banks had avoided over €600m reserve losses. Only one of four banks in the Eastern group involved with the equity change and it had a relatively low amount (€15m Aizkraukles Banka). The situation among Northern samples is also insignificant. For three of them the reclassification had no effects on shareholder equity. Two banks experienced positive effects and there was one bank (Danske Bank) that experienced

valuation losses (€260m) through equity reserve. In the Southern group, when the reclassification avoided larger losses for 7 sample banks, three of ten banks experienced negative effects on their shareholder equity. The reasons that many banks encountered limited, zero effects, or even negative effects brought by the reclassification include: the effect of further fair value losses that are transferred from profit account to equity when the reclassification happened between “held for trading” and “available for sale”. This is exactly the situation with Danske Bank and Emporiki Bank. Secondly, the entities might reclassify assets out of “available for sale” which leads to positive effects on equity. However as long as financial assets are also reclassified into this category, the positive effects will be reduced or even reversed like in the case of NBG and Piraeus Bank. Lastly, most of the banks encountered zero effects on their shareholder equity simply because there were no reclassified financial assets in or out the category of “available of sale”.

### ***Comparison results of avoided losses by reclassification***

Without considering the total amounts of profit or shareholder equity, the evaluation on effects brought by reclassification would not be objective. The following section will demonstrate the comparison results of avoided losses by reclassification and the total figures with regards to profit or shareholder equity. The comparison can be performed by the ratio and represents the percentage the profit or equity could increase/decrease approximately if no reclassification (under the assumption that no tax effects and all the valuation losses go into profit or equity account).

The following table shows the proportion changes made on the *profits* due to the new reclassification. It was apparent that the changes were significant, and the previous differences with regards to avoided valuation losses become less significant among different groups. 15 banks avoided fair value losses, more than 10 percent of their current profits, and in these 15 banks there were 3 banks over 50 percent, whereas 5 banks falling into the 30% to 50% range. When Danske Bank avoided €260m losses through reclassification, it took up over 80 percent of the bank’s annual profit and the €260m losses became reserve change, which only was worth about 2 percent of shareholder equity. Deutsche Bank was ranked number 2 by avoiding losses amount to 58 percent of 2008 result. It was followed by Monte dei Paschi di Siena Bank (51%) and UniCredit Group (47.3%). The size and region of banks did not undermine the effect of reclassification on the profits. In Eastern group, the sample banks are small players with less profit; however, one of the banks (Medicinos Bank) reduced losses by 34 percent of its current profit.

	-10%-0%	0%	1-10%	10%-20%	20%-30%	30%-50%	50%+
<b>EE(4 banks in total)</b>	1	0	2			1	
<b>WE (15 in total)</b>	0	6	4	1	1	2	1
<b>NE (6 in total)</b>	1	0	0	1	1	1	1
<b>SE (10 in total)</b>	1	2	3	3	0	1	1
<b>Total</b>	3	8	9	5	2	5	3

**Table 8:** The proportion changes made on the *profits* due to the new reclassification

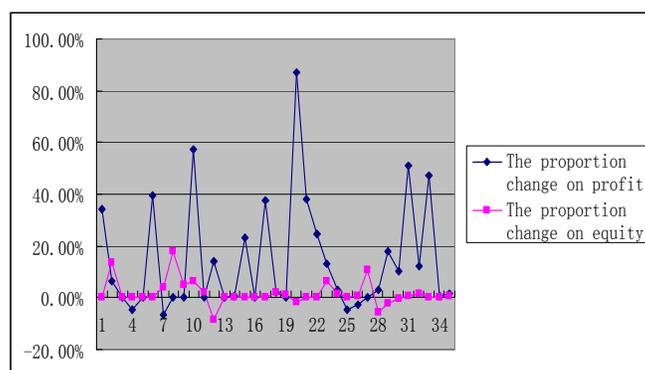
The situation for the proportion changes on *equity* was quite different. The reclassification imposed less significant effects on shareholder equity. Only 3 banks avoided negative change over 10 percent, in which Volksbank got more desirable outcome by avoiding €220m in

reverse losses (18% of its equity). The other two banks with limited size of shareholder equity, Aizkraukles Bank and EFG Eurobank, were also benefited from the reclassification by 13.4 percent and 10.8 percent. On the other hand, Dresdner Bank encountered negative effects (-8.7%), €240m fair value losses recorded under equity; because of €0.4bn reclassified assets from “fair value through profit or losses” to “available for sale”.

	-10%-0%	0%	1-5%	5%-10%	10%-20%
<b>EE(4 banks in total)</b>		3			1
<b>WE (15 in total)</b>	1	6	6	1	1
<b>NE (6 in total)</b>	1	3	1	1	0
<b>SE (10 in total)</b>	3	1	4	1	1
<b>Total</b>	5	13	11	3	3

**Table 9:** The proportion changes made on the *shareholder equity* due to the new reclassification

If we compare these two perspectives “profit change” and “equity change”, as stated in the following graph, it clearly shows that the reclassification had more influential impacts on entities’ profit results than shareholder equity since the values of “profit change” are moving further away from the x-axis than the values of “equity change”. The value ranges in the above tables also support this argument.



**Figure 10 :** The comparison of percentage changes on profit and equity

As mentioned in the above sections, the positive effects on equity will be compromised by valuation losses when the financial assets were reclassified into available for sale. Since the strategy is to reclassify the assets that exposed to problematic market, stabilizing the operation results and avoiding further losses are the main purposes of reclassification. Many bank entities seem to enjoy the obvious change on profit result. The fair value changes through profit account play an important part of operating results. On the other hand, the unrealized fair value gains or losses take up relatively small percentage of shareholder equity. Moreover, the revaluation reserves, under the category of supplementary capital in most circumstances, do not reflect ordinary business results. The effects on equity are also limited because revaluation reserves usually are not able to be used by the entities for leverage purposes. Nevertheless, the positive effects on revaluation reserves help the banks with their capital status.

### 4.3 Evaluation on the disclosure of reclassification

In general, the sample group of 35 banks had applied the reclassification option, but only 31 of their annual reports were evaluated based on the checklist we made and scored accordingly<sup>69</sup>. Four of them have still not released their annual reports, and can therefore not be evaluated. Two were from Western group and one from Southern and Eastern respectively. As shown in summary table 10, the average score of 31 banks was 6.145. The highest score was 9 for Deutsche Bank, and the lowest score was 4.5 from the Lithuanian Medicinos Bank. As the average score was little over 6, which was the score after meeting all six required items, the overall performance of European banks applying IFRS 7.12A the first time was acceptable as efforts had been made to meet the disclosure requirement in IFRS 7. Overall, most of the banks disclosed the required information after applying the reclassification option. Some of the Western banks did fairly well to meet the requirements and made additional efforts to disclose more relevant information which gives the various user groups a better idea about how the reclassification actions are affecting the entities.

	Number of banks	Average score	Max score	Min score
Total sample group	31	6.145	9	4.5
Northern EU group	6	6.5	7	6
Southern EU group	9	5.44	7	5
Eastern EU group	3	5	5.5	4.5
Western EU group	13	6.73	9	5.5
Region-wide group	18	5.86	7	4.5
EU-wide group	13	6.53	9	6

**Table 10:** Summary of disclosure scores

From the regional groups, we could see that Western group had a higher average disclosure score on information of the reclassification. The average point of Northern group is slightly higher than the total average score. The average disclosure scores of Southern and Eastern are all below the average level of the entire sample group. Eastern group performed the worst in all four regional groups. However, when considering that four of the selected Eastern banks applied the reclassification option; the results of evaluating three annual reports would not establish a solid generality that the banks in this group could not meet the disclosure requirements in the new amendment. Nevertheless, the evaluation of the disclosure with regards to reclassification, gave us an overall performance of the different banks to apply the new paragraphs in IFRS 7 in accordance with the checklist. It was evident that the bank samples from Western Europe performed more professionally and disclosed extra information related to reclassification activities in addition to the six basic requirements.

The extra information mentioned in this part are the same as the extra items used in the completed evaluation table. They are: 1. The break-down information about reclassification in different business segment; 2. The break-down information about reclassification on different financial products, for instance, US market portfolios; 3. The effects of reclassification on some other issue besides profit/loss, equity, for example, the effects on credit risk or capital ratio; 4. Detailed explanation on why they had reclassified into these particular type of financial assets. This extra type of information covers all the extra items we found in the researched banks annual reports. From the extra items they disclosed, we can see that the banks with higher disclosure score tried to reveal more details about the reclassification and the reclassified assets, which are beyond the basic requirements of IFRS 7. As we expected,

<sup>69</sup> Appendix 5

the transfers of financial assets out of fair accounting valuation to amortized cost were mostly belong to the level 2 or 3 of the valuation hierarchy. However, only some of sample banks clearly stated the detailed information regarding what valuation the assets were applied with before the reclassification (as part of the break down information for reclassified product).

It was also noticeable when the groups became “*European-wide*” or “*Regional-wide*”, the average scores of disclosure were quite different: European-wide banks had higher average score “6.53” and the average of Regional-wide group were lower than the average score of whole sample group. The cause behind this might be the fact that banks operating European-wide (some even world-wide) may be exposed to larger market risk and more involved with the ongoing turmoil. The reclassification option can then help the banks with their market issues. Another reason could be that the European-wide banks are more sophisticated with their disclosure techniques and have more professionals to analyze their relevant problems. These explanations will be made clearer in the statistical analysis section in chapter 5.

Among the basic six items (item A to item F), nearly every bank followed the first five items. Only two of them stumbled on item B that failed to disclose the current fair value. The other two banks did not disclose the profit/loss changes with or without the reclassification. The most problematic item was item F, which requires the disclosure on “effective interest rate” and “expected cash flow” from recovery of financial assets. Only 17 out of 31 (55%) banks met this particular requirement, 7 banks (23%) failed to disclose the expected amount of recovery cash flow, and the rest samples did not have information regarding this item. We believe that many banks did not pay attention to this matter, due to the effective interest rates varying from entity to entity, and are usually applied internally. For the external users, it would not be very helpful with their economical decisions if they only have the rate figure to go on. Secondly, the figures of expected cash flows are more objective than fair value or carrying amount of relevant assets. If the entities overestimate their figure, it would not have substantial effects on either entities or the users. Thirdly, some of the expected cash flows on certain assets might be difficult to obtain since there is no active trading market and few reliable inputs can be applied. As a result some entities may follow the approach that miss this information than report it unreliably.

Nonetheless, one of purposes of the disclosure requirement introduced by the new amendment was to maintain the *comparability* between the information regarding the reclassification released by the financial reports of different entities. The fact that most of bank entities tried to fulfill the required standards and some entities made additional disclosures proves the purpose of regulators is working but yet not idyllically. We believe that as the application was applied first time, the practice on the disclosure requirements will be under development for both regulators and the entities. When the entities disclosed the *relevant* information of effects on profit or equity, it raises the question whether the information of effects on other issues such as risk estimations or financial indicators should become part of the regulatory requirements. And we believe that the extra items some entities disclosed can be taken into consideration or references to develop upon. Keep in mind that the disclosure evaluation is based on the amount of fulfilled items, and the quality of the disclosure is therefore not included in the evaluation approach. Furthermore, the “extra items” included in our checklist is somewhat subjective to be perceived as the basic requirements. The disclosure regarding relevant information cannot be identical and it depends on the management’s decision to disclose more voluntary information.

## 5. Statistical results and analysis

*The chapter will build upon the reclassification findings and discussions made in chapter 4. In addition, the reclassifications findings will be analyzed through statistical and comparison analysis to ensure objectivity and reliability of the gathered data.*

### 5.1 Descriptive statistics

The descriptive statistics of all three non-financial variables (region, operation region and operation type) have been discussed in chapter 4, especially the bank samples having a choice to apply the new amendment or not. Overall, all banks from Western region and all bank entities operating European-wide applied the new amendment. As mentioned before, the different operational types (e.g. general business and multi business) seem to have less influence on the choice of reclassifying financial assets. The following section regarding the descriptive statistics will focus on the financial variables and their differences between the sample groups that applied the amendment and the group that did not apply the amendment.

**Table 11:** Summary table for descriptive statistics of financial variable

	DE ratio*	ROE* (%)	Capital ratio (%)	LLP to TA (%)	Log TA**	Total asset** (Euro m)
<b>Sample group that applied the new amendment (N=35)</b>						
Minimum	6.000	-216%	4.48%	0.00%	2.335	216
Maximum	131.000	25.9%	17.70%	1.80%	6.343	2202000
Mean	29.775	-5.61%	11.70%	0.50%	5.159	489487.9
Std. Deviation	25.11	0.43	0.03	0.00	0.918	643134.5
<b>Sample group that did not apply the new amendment (N=15)</b>						
Minimum	7.000	0.67%	9.81%	-0.03%	2.499	315.55
Maximum	29.100	24.4%	22.30%	2.52%	5.735	542650
Mean	16.713	12.34%	12.34%	0.65%	4.356	113982.8
Std. Deviation	7.60	0.08	0.03	0.01	0.97	176681
<b>The whole sample group (N=50)</b>						
Minimum	6.000	-216 %	4.48%	-0.03%	2.335	216
Maximum	131.000	25.9%	22.30%	2.52%	6.343	2202000
Mean	25.857	-0.23%	11.97%	0.55%	4.918	376836.3
Std. Deviation	22.15	0.37	0.03	0.01	1.00	571084.1

\*\*Mann-Whitney U test support that there is certain difference between two groups, significant at the 0.01 level (2-tailed).

\* Mann-Whitney U test support that there is certain difference between two groups, significant at the 0.05 level (2-tailed).

As shown in the summary table, the sample group which applied the new amendment had a high *D/E ratio* that was higher than the average, as well as a large amount of *total assets* that was higher than the sample banks that did not apply the amendment. With regards to the *ROE ratio*, it was clear that the second sample group showed a stronger profitability as it was higher than the average. The mean of the capital ratio and LLP to TA (loan loss provision to total assets) were similar, but the second sample group showed a slightly higher average. Since the different average figures do not necessarily mean that the distribution or variances of the variables are different, Mann-Whitney U test and T-test were conducted on the values

of these financial variables. As shown in the appendix 6, there were certain differences on the variables such as D/E, ROE and Log TA (logarithmic form of total assets) for the two sample groups (the one that followed the amendment and the one that did not follow). We saw no difference on the other two financial ratios: capital ratio and LLP to TA. Therefore, the first three variables are expected to achieve more significant results in the logistic analysis.

## 5.2 Logistic regression results and analysis

Before the logistic analysis was applied, the correlation test of all five financial variables was conducted to investigate the relationships of these variables by using all the samples<sup>70</sup>. Another purpose for this test was to avoid the multi-collinearity problem, due to the fact that the presence of multi-collinearity will not lead to biased coefficients. However the standard errors of the coefficients will be overstated<sup>71</sup>. In general if two variables are correlated at a rate greater than 0.6, it is better not to use them in the regression at the same time. By looking at the table in appendix 7, it shows that the D/E ratio and ROE had a negative correlation (-0.5), and is lower than the result in the reclassification group (which was -0.617). Noticeably, in the whole sample group the Log TA has a relatively high association with D/E ratio which indicates that larger banks tend to apply more aggressive leverage policy. In regards to a financial turmoil as the current situation, this could cause some serious credit/liquidity issues that would be reflected as losses in the financial reports. Moreover, these two variables will be applied in different variable sets. In this section, the dependent variable will be “reclassification event” (1=applied the new amendment, 0=did not apply the amendment).

As shown in the following table 12 below, the model significances of the five models are considerably good under their degrees of freedom. Only the significance of model 2.1 is a bit over the 0.05 level. Nevertheless, this means that the overall models are statistically significant. The three non-financial variables were firstly taken into the logistic regression and the results are under model 1. The overall performance of this model gives the impression that it was good; however the coefficient estimates showed no statistical significance. A reason could be that the amount of the second sample group (R=0) was limited. When these variables were categorized in the SPSS analysis, especially the “region”, it became several dummy variables, and the frequency on each variable became relatively low. Subsequently the significant results are therefore difficult to achieve.

In order to obtain the relationship of the non-financial variables and the dependent variable, as well as the differences between the two sample groups, the *Chi-square* and *logistic regression test* with each variable were performed (see appendix 6 and 7). The results of the Chi-square tests illustrate that there are certain differences in the frequency of region (significant at the 0.01 level) and the operation region (significant at the 0.05 level) across the two groups, however not with the operation type. Together with the logistic regression test results<sup>72</sup>, the bank entities from more developed regions, Western and Northern, were more likely to reclassify their financial assets, because the odds ratio was bigger than 2 and the coefficient estimation of region variable was also positive and statistically significant. The operation type does not affect the reclassification event, which means that the banks involved with high-risk business are not necessarily in favor of applying the option to reclassify their financial assets.

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<sup>70</sup> Appendix 7 (Correlations with non-financial variables were also tested, unreported in the appendix, which showed no material difference with the correlation test in the linear regression section)

<sup>71</sup> Anderson et al. (2007) pp. 925-928

<sup>72</sup> Appendix 7

The relationship of operation region and dependent variable was still unclear. In contrast to the Chi-square test, there was no significant result regarding the operation region in the individual logistic regression. It could be that in our study the frequency of the variable was a bit extreme since all banks operating European-wide had applied the amendment.

**Table 12:** The logistic regression results with different variable sets

	<b>Model 1</b>	<b>Model 2.1</b>	<b>Model 2.2</b>	<b>Model 2.3</b>	<b>Model 3</b>
$\chi^2$	20.652	8.710	13.627	11.507	24.664
Significance	0.001	0.069	0.009	0.003	0.003
-2log likelihood	40.434	52.376	47.460	49.579	36.422
Prediction percentage <sup>73</sup>	78%	72%	74%	72%	84%
Degrees of freedom	5	4	4	2	9
	Coefficient estimates (significance)				
<b>IndeVariable</b> (Prediction sign)					
Region (+)	-19.065 (0.305)				-17.264 (0.301)
OP region (?)	-18.221 (0.998)				-17.038 (0.998)
OP type	-1.319 (0.130)				-2.109(0.07)*
DE ratio ( $\pm$ )		0.043 (0.321)			
ROE (-)		-5.539 (0.170)	-6.911 (0.100)*	-6.301 (0.109)+	-3.891 (0.510)
Capital ratio		3.835 (0.770)	21.975 (0.184)		42.850 (0.201)
LLP to TA		-16.613 (0.798)	32.930 (0.636)		-7.445 (0.926)
Log TA (+)			1.172 (0.026)**	0.718 (0.047)**	1.273 (0.144)

\*\* significant at the 0.05 level (2-tailed).

\* significant at the 0.1 level (2-tailed). +significant at the 0.1 level (1-tailed)

Note: Model 1 includes only the non-financial variables; Model 2.1 includes only the financial variables without Log TA

Model 2.2 includes only the financial variables without D/E; Model 2.3 includes ROE and Log TA

Model 3 includes all variables without D/E

According to the results, the ROE ratio was significant to models 2.2 and 2.3, and all the coefficients of ROE were also negative. Thus, it indicated that the banks that did not apply the option were characterized by a higher ROE compared to the banks that had applied the reclassification. With the result from the individual variable test, it also illustrates that the banks with lower ROE are more likely to apply the amendment. As we mentioned, the reclassification prevents further valuation losses and this helps with the profitability performance of bank entities. It comes then as no surprise that the ROE becomes a strong *explanatory variable*. The future practice of this amendment might be an incentive for the management to avoid poor profit performance, and could potentially be a problem. The variable Log TA is found significant to model 2.2 and 2.3 with a positive coefficient. It was a contrast to ROE, as the banks that had applied the amendment had exhibited a larger bank size. An argument that could be made is that the larger banks prefer to apply the reclassification option, as the banks with larger monetary size are more likely to have more problematic financial assets that need to be dealt with. If we consider the Log TA alone, as the odds ratio-exp ( $\beta$ ) is 2.36 it means that when the Log TA increase by 1 unit (over €200m), the likelihood of applying the amendment is 2.36 times than the lower asset level.

The variable D/E ratio did not exhibit any significant results in the table above, but in accordance to the individual regression test (appendix 7), the D/E ratio had a positive coefficient and a relatively small odds ratio. In a nutshell, the D/E ratio is relevant but not as significant in terms of association. Indeed, the reclassification of certain financial assets may

<sup>73</sup> The prediction percentage of block zero is 70%

help entities with their leverage by preventing valuation losses through equity. As mentioned in previous section, the effects on shareholder equity are somehow limited and could also be the cause for the above results.

The results regarding *capital ratio* and *LLP to TA* are insignificant, when paying attention to the model results and individual test. The two variables contributed less in the regression model, and had the least relevance over the dependent variable. This also matched the results from Mann-Whitney U and T-test. The reasons that the capital ratio did not differ from the two groups, and was less affected by the reclassification could be firstly the new Basel II regulation that allowed bank entities to raise more obligatory capital which would increase the capital ratio<sup>74</sup>. Subsequently the effects brought by the new amendment might possibly be hidden. The effects could be possibly insignificant, for example two sample banks had even disclosed information that the application of reclassification did not affect their capital adequacy ratio. Secondly, LLP to TA is not significantly different between the two groups. Although a large amount of financial assets were reclassified into loans and receivables, the entities intend to hold these assets for certain time period and the default possibility would not rise as the assets were just reclassified for a few months (starting from June 2008). However, the future situation might be a lot different when the default possibility increases. A higher loan loss provision might occur in the entities that reclassified a large amount of its financial assets to loans.

When coming down to the overall performance of the five models in table 12, the three models with only financial variables seem to have lower prediction abilities and higher -2log likelihood (e.g. the lower this value is, the better the fit<sup>75</sup>). The likelihood ratio test<sup>76</sup> can be performed to see if the full model is an improvement of partial model. The value difference of -2log likelihood, for model 2.2 and 2.3, was 2.119 which is less than the critical value 7.378 at the 0.025 level. The model 2.2 is not improved from model 2.3 and the extra variables (capital ratio and LLP to TA) are not quite relevant. Subsequently the -2log likelihood difference for model 3 and 2.2 was 13.157, which was less than the critical value 18.475 at the 0.01 level. Even though the full model has better prediction ability, the efficiency of the model is not improved. Indeed, the limited sample amount is also a factor that weakens the performances of the models. Without the irrelevant variables, the result of likelihood ratio is expected to be improved. Our purpose is not to construct an accurate prediction model, but this is a good start for future studies. In addition, the prediction signs of relevant variables are added in the above table based on the results.

## **5.3 Correlation and regression results on disclosure**

### **5.3.1 The correlation of disclosure score with the reclassification figures**

Firstly, the correlation between the disclosure score and total reclassification amount can be tested to obtain correlation coefficient. According to the result from the correlation test (table 13 and 14), the correlation coefficient (Spearman's rho) between the two set of figures was 0.717 and the result from Pearson Correlation was 0.413. Both represented a positive and a

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<sup>74</sup> Swedbank's annual report p. 35

<sup>75</sup> The fitness of prediction and real cases

<sup>76</sup> Compare the differences of -2log likelihood value with the critical value in the Chi-square distribution table

relatively strong correlation. For the group of banks that had applied the reclassification option, there were some samples with high reclassified amount of assets, which had also displayed considerably high disclosure level on the reclassification information. An interpretation for this relationship, we believe, is that the high reclassification amounts represent reclassification activities that contain more influential information and has also significant impacts on entities. A reason could be that some entities want to assure their investors by additional disclosure. Furthermore, the objective of the financial disclosure is to convey *relevant* and *reliable* information to various user groups. Consequently, the larger amount of reclassified assets gives the entities more substantial matters to work with.

When “total assets” was included as the control variable, the result of partial correlation (appendix 8) showed low correlation ( $r=0.273$ ) and being statistically insignificant. Similar results were obtained in the correlation of *disclosure score* and *reclassified amount to total assets*; Pearson 0.16 and Spearman's rho 0.09. These results indicate that as an individual variable, the reclassified amount of financial assets does not have strong explanatory power for the evaluation score of disclosure on reclassification. The control variable in this relationship, the size of sample banks (the amount of total assets) plays a significant role that may be strong in the regression models to explain the situation of relevant disclosure evaluation. In this case, the monetary size of banks weakens the strong correlation between the disclosure score and reclassification amount. A cause could be, we believe, that larger banks tend to have more problematic financial assets to deal with and then reclassified higher amounts of financial assets. This statement is supported by the result that the correlation coefficient, Spearman's rho, between reclassification amount and bank size is positive 0.76, which is statistically significant. As we reasoned earlier, *the higher reclassification amount the more informative the source* goes well together with the underlying reason that the size of a bank plays an important role for the disclosure of reclassification practice. This can be further approved and analyzed in the regression model.

**Table 13:** Pearson Correlation of disclosure score and reclassification figures

	Profit change ratio	Equity change ratio	RM to TA	Reclassified amount
Disclosure score	0.036	-0.206	0.160	0.413*
Sig. (2-tailed)	0.847	0.267	0.390	0.021
Profit change	1	-0.194	-0.289	-0.167
Sig. (2-tailed)		0.295	0.114	0.369

\* Correlation is significant at the 0.05 level (1-tailed)

**Table 14:** Spearman's rho of disclosure score and reclassification figures

	Profit change ratio	Equity change ratio	RM to TA	Reclassified amount
Disclosure score	0.033	-0.186	0.088	0.717**
Sig. (2-tailed)	0.862	0.316	0.637	0.000
Profit change	1	-0.355*	-0.355*	-0.023
Sig. (2-tailed)		0.050	0.050	0.903

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (1-tailed)

The insignificant correlation of disclosure scores and profit/equity changes showed that the stronger financial impacts brought by the reclassification practice were not associated with the incentive to disclose more relevant information. In a nutshell, the entities affected by the reclassification significantly did not disclose more relevant information than the entities that were less exposed to the new amendment. On the other hand, the disclosure requirements set

out by the amendment gives clear directions that reduce the gap of disclosed information. However, the extra disclosures made by the entities are less related with the financial impacts of reclassification as we mentioned before. This might be a disadvantage of the quality of some evaluated extra disclosure.

In addition, the profit changes and equity changes due to reclassification are relatively correlated ( $r=-0.355$ ), which is statistically significant at the 0.05 level. A similar trend can be seen in the correlation of “profit change ratio” and “reclassification amount to total asset”. Firstly the correlation of changes on profit and equity could be explained by the fact that sample banks experienced more significant changes on profit than on shareholder equity. Secondly, the correlation of “profit change ratio” and “reclassified assets to total assets” (RA to TA) might be conflicting to the idea that higher amounts of reclassified assets lead to higher profit change. This result can be explained by the fact that significant amounts of valuation losses avoided by the banks are not included through profit accounts.

### **5.2.2 The correlation test of disclosure score and other variables**

As presented in the previous section, descriptive statistics of the variables involved are the same as the sample group that applied the new amendment. Before looking into the regression model analysis, the correlations of these variables have been tested from this particular sample group. In order to reduce the complexity of constructing dummy variables for non-numeric variables such as “region” and improve the accuracy of regression models, the variable “region” is recoded as “1=Western Europe and Northern Europe” (N=21) and “0=Southern and Eastern Europe” (N=14), since the average disclosure scores and market maturities of the paired regions are similar to each other (Western and Northern regions are for instance more developed). In the correlation matrix<sup>77</sup>, it clearly shows that with the three non-financial variables, the disclosure score is significantly associated with “*region*” ( $r=0.652$ ) and “*operation region*” ( $r=0.524$ ), but not with “operation type”. The bank samples from more developed region have higher disclosure score and if the entities are operating on a wider geographical scale, they tend to perform better on the reclassification disclosure. The results from the region were expected since the variable is recoded. The result for “operation region” could be related to the fact that the operation region and bank size are highly associated. In a nutshell, the banks operating European-wide are more likely to be entities with larger monetary size.

Among the financial variables, the *bank size (total assets)* had the strongest and positive correlation with the disclosure score ( $r=0.724$ ). An argument that could be made is that the larger banks had more sophisticated information system which reduced the cost of additional information collection and reporting, especially when the entities are dealing with the first attempt like the new reclassification option. The disclosure score is also positively related with leverage ratio (D/E ratio). This result was different than some of the previous findings. Based on previous studies with regards to disclosure related to financial instrument (Lopes and Rodrigues, 2007), there were not significant relationships between leverage and disclosure level regarding financial instruments. However, according to some studies on general voluntary disclosures (Ahmed and Courtis, 1999; Ferguson et al. 2002), the relationship of financial leverage and voluntary disclosure level were positive and significant. The possible explanation for the inconsistency could be that the studies are conducted on a

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<sup>77</sup> Appendix 9

particular type of disclosure and the demand from the creditors that require more information could not be clearly reflected in this relationship. With regards to the loan loss provision ratio (LLP to TA), it was negatively associated with the disclosure level on reclassification. It seemed that the entities with higher risk expectation disclosed less information on reclassification. Since the loan loss provision is not heavily affected by the reclassification of financial assets, the negative association is not strong in this case ( $r=-0.466$ ). A similar situation happened with the ROE ratio, but was even less statistically significant.

Between the independent variables, the ROE and D/E ratio have a strong negative association ( $r=-0.617$ ), which means that the two variables would not be in the regression model at the same time. The test result of variance inflation factor (VIF) suggests the same solution. In addition, the bank size (log-total assets) is positively related with D/E ratio and all three non-financial characteristics, especially operation region (OP region,  $r=0.709$ ) and operation type (OP type,  $r=0.607$ ). It is understandable that the banks operating European-wide or involved with multi businesses tend to be larger entities. In fact these correlations do not raise the multi-collinearity issue and the regression results will approve it.

### **5.2.3 The multiple regression results and analysis**

Some popular control approaches were conducted to obtain more accurate regression results, for instance, the *logarithmic form* on total assets in order to allow the *non-linear relationship*<sup>78</sup>, and test quadratic terms of some independent variables to capture decreasing or increasing marginal effects<sup>79</sup>. The test results for quadratic terms (not reported) did not demonstrate any improvements when compared with the reported results. As shown in the following summary table, several regression models were performed in order to analyze the relationships of disclosure level on reclassification and different sets of variables, both together and individually. According to the F values and overall significances of all six models, along with the F distribution checking table<sup>80</sup>, these results show that all six models are statistically significant and there is a significant relationship existing between the disclose score and these sets of independent variables. The fact that R squares of all six models are over 0.45 represents that these regression models have relatively good explanatory effects. In addition, the maximum variance inflation factors (VIF) of these models are far below 10 (when VIF values are above 10, there usually is a multi-collinearity problem<sup>81</sup>). So it indicates that all six models do not have problem with multi-collinearity.

When the regression equation only contains non-financial variables,  $R^2$  and Adjusted  $R^2$  of the model are 0.472 and 0.414. The  $R^2$  value is the proportion of variance in the dependent variable that is explained by the regression model (Corston and Colman, 2000). It means the three non-financial variables explain 47.2% of the variance in the disclosure score. Since the  $R^2$  value increases with more variables, the adjusted  $R^2$  is more reliable and meaningful. In this case, the adjust  $R^2$  value is also relatively high. Then from the individual coefficients, we can clearly see that the variable Region has highest Beta which indicates the unique contribution to explain the dependent variable. Since the standardized Beta is applied on all the coefficients, the comparable coefficient 0.3 represents that OP region contributed secondly in the non-financial variable set. Both coefficients are statistically significant. Last the

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<sup>78</sup> Ahmed & Henry (2004)

<sup>79</sup> Hodgdon (2004)

<sup>80</sup> Anderson et al. (2007) pp. 925-928

<sup>81</sup> Pallant (2005)

operation type did not really affect the disclosure score and similar situations happened with the overall models. We believe therefore that in our study the “operation type”, as a characteristic for bank entities, is not associated with the disclosure of reclassifying financial assets. There were not much difference on the disclosure level of reclassification between the banks with more ordinary financial business and the ones involved with more diversified services (for example investment banking).

**Table 15:** The results of regression models (dependent variable: disclosure score)

	<b>Model 1</b>	<b>Model 2.1</b>	<b>Model 2.2</b>	<b>Model 3.1</b>	<b>Model 3.2</b>	<b>Model 4</b>
$R^2$	0.472	0.558	0.543	0.597	0.590	0.556
Adjusted $R^2$	0.414	0.490	0.473	0.474	0.466	0.507
F value	8.06	8.206	7.728	4.859	4.733	11.28
Significance	0.001	0.000	0.000	0.002	0.002	0.000
Included obs	31	31	31	31	31	31
	Coefficient (t-statistic)					
<b>IndeVariable</b>						
Region	0.480(3.103)**			0.166(0.843)	0.188(0.961)	0.311(1.938) **
OP region	0.300(1.581)+			0.141(0.699)	0.122(0.590)	
OP type	0.063(0.359)			-0.151(-0.784)	-0.163(-0.842)	
DE ratio		0.245(1.602)+		0.166(1.001)		
ROE			-0.200(-1.280)		-0.131(-0.793)	
Capital ratio		0.249(1.563)+	0.247(1.476)+	0.146(0.776)	0.145(0.733)	0.118(0.834)
LLP to TA		-0.202(-1.263)	-0.200(-1.225)	-0.162(-0.913)	-0.154(-0.864)	
Log TA		0.578(3.533)**	0.642(3.947)**	0.504(2.031) *	0.559(2.193) *	0.540(3.296)**
Max VIF	1.848	1.575	1.597	3.517	3.643	1.635

\*\* significant at the 0.01 level (2-tailed). \* significant at the 0.05 level (2-tailed). + significant at the 10% level (1-tailed)

Notes: Model 1 includes only the non-financial variables; Model 2.1 includes only the financial variables without ROE

Model 2.1 includes only the financial variables without D/E; Model 3.1 includes all the variables without ROE

Model 3.2 includes all variables without D/E; Model 4 includes the three variables with higher significances

From the two sets of regressions with financial variables (Model 2.1 and 2.2), the values of adjusted  $R^2$  show that the financial variables have more explanatory power over the non-financial variables, regarding the disclosure level. The explanation could be that as a new regulatory change, the reclassification of financial assets is more related to the financial position of different bank entities. Apparently among all the financial indicators, the total asset of bank (Log TA) has the strongest contribution in both regression models (Beta 0.578 and 0.642, significant at the 0.01 level). Then it is followed by the positive contribution from D/E ratio and capital ratio (both at the significant level of 10%). These results are not consistent with the above correlation results. So these two variables might have certain but not strong relationship with the disclosure score on reclassification. D/E ratio describes the capital structure of the bank entities. In our case, the general demands on more information from creditors agreed by many previous studies might be weakened by the fact that financial institutions such as banks usually have higher D/E ratios than other sectors and large proportion of their creditors are individual customers who do not have powerful influence. ROE and LLP to TA both have negative contribution and statistical insignificance. The fact that the reclassification helps the banks to avoid further losses and positively affect the reported profits, the two variables that might be affected by reclassification of financial assets, ROE and loan loss provision ratio, should be more involved with the relevant disclosure level.

After testing the financial variable sets without the most significant variable-Log TA<sup>82</sup>, the positive relationship of D/E ratio and disclosure level was indentified, so was the negative

<sup>82</sup> Appendix 10

contribution of LLP to TA. As the adjusted  $R^2$  is not so high (0.293), the ability for these two variables to explain the change of disclosure score is limited. It was interesting to see that the regression results with only ROE and capital ratio showed that these two variables did not have explanatory power on the change of disclosure score if they act alone. So the banks with higher profitability or healthier capital adequacy do not necessarily perform better on the disclosure regarding the new amendment.

The overall models (Model 3.1 and 3.2) that include all the selected variables could not really improve the explanatory ability of the variable set, since the adjusted  $R^2$  is decreasing despite the increased  $R^2$ . It does not necessarily mean that the overall model is not efficient. The possible explanation could be more variables are applied on a limited sample pool. The results regarding different variables are similar with the previous variable arrangement. However, the positive contribution of Log TA stands out. This approves that the bank size is the most significant variable among all variables and have the strongest relationship with the disclosure level on banks' reclassification activities. The bigger banks do have certain advantages to achieve more professional reporting. Besides the reasons we mentioned in the previous section, some scholars believe that greater demand from professional users such as financial analysts would also be one of the possible explanation for bigger entities to disclose more information<sup>83</sup>. In our study, the larger bank entities are big market players of regional industry or European financial market. Hence their movements have huge influence over the entire market. Consequently the bigger bank entities are more obligated to fulfill the regulatory requirement and disclose the relevant information. The model with the significant variables further approved the above argument, and indicates that banks from more developed regions have better performance on the disclosure evaluation. We think that these banks operate in more mature markets and regulatory system which have higher information demand. These advantages could lead to the possible result that their professionals may possess superior understandings on some latest market developments. Then these understandings help them to interpret the amendment and the following consequences. This also could be the reason that more sample banks from developed regions followed the new amendment.

If we compare our results with some previous papers that focus on financial instrument disclosure, the results with entity size are consistent with the previous study of Chalmers and Godfrey (2004). They conclude positive relationship between size and disclosure level. However, lots of studies did not have significant results to support this relationship<sup>84</sup>. The positive result of operation region is also similar with Cuijpers and Buijink's study, as they found more internationalized companies have better disclosure level. But some other studies did not come across the same conclusion<sup>85</sup>. Our finding of limited positive influence from D/E ratio is not consistent with some previous studies (Lopes & Rodrigues, 2007; Abd-Elsalam & Weetman, 2003). In fact, as our study objects, the disclosures on the reclassification are first-time application. It is reasonable to see some inconsistency. Some of the variables such as LLP to TA are selected based on our understanding over these issues, so it is not easy to conduct previous study comparison. Nevertheless, the results regarding these variables are relatively consistent through the analysis.

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<sup>83</sup> Hossain et al. (1994)

<sup>84</sup> Lopes & Rodrigues (2007) p. 46

<sup>85</sup> Lopes & Rodrigues (2007) p. 46

## 6. Conclusion and suggestions for further research

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*The final chapter will answer the paper's purpose and research questions based on the findings made, and the statistical results and analysis. Lastly, suggestions for further research will be presented.*

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### 6.1 Conclusion

In our study, the first application of the new amendment (to IAS 39 and IFRS 7) provided a great opportunity to learn about the impacts brought by the reclassification of financial assets and how this practice was associated with the different characteristics of bank entities. Facing the option to reclassify certain financial assets, banks showed different feelings and strategies to deal with the problematic assets. Generally, banks with different characteristics handled the option to apply the new amendment, the practice and the disclosure of the reclassification differently. The results from 2008 affected the banks samples that had applied the amendment substantially.

In our sample group, 35 entities out of the total 50 applied the amendment. From regional perspective, the banks samples from Western region were more in favor of this option than the entities from Northern and Eastern Europe. Some possible explanations, we believe, could be that the portfolios of their financial assets were exposed differently to the current market and the businesses these banks were involved with operated at different risk levels. The result also showed that all banks operating European-wide level reclassified certain financial assets. As the *first research question* dealt with the results brought by the new amendment we found that more than half of the banks (55%) had applied one form of reclassification, whereas 40% of the bank samples applied two or three types of reclassification. There were only 2 of them that had used all four types. Among the four types of reclassification, the “available for sale” to “loans and receivables” was the most popular choice, followed by the “held for trading” to “loans and receivables”. The total amounts of reclassified assets were different from banks and regions, and larger banks or samples from developed regions reclassified more significant amounts of financial assets.

Regarding the amounts of assets reclassified out certain categories, the proportions of the amounts that were reclassified out from for instance “Held for Trading” or “Available for Sale” were diversified among the sample entities. Some of the banks reclassified significant percentage of financial assets out from the categories under the fair value accounting, for instance Deutsche Bank. Other banks showed very limited reclassification proportion such as Barclays Bank. From the results, we see that the higher percentages of reclassified amount were usually associated with more significant effects on profit or shareholder equity.

After the reclassifications were applied, the profit or shareholder equity of the bank entities could be affected positively by avoiding future valuation losses. In our study, more banks took advantage of the positive effects on profits. The positive effects on shareholder equity are not significant as expected. The reasons could be that: the positive effects might be compromised by valuation losses when the financial assets were reclassified into “available for sale”. Also the unrealized fair value gains or losses usually take up relatively small percentage of shareholder equity. In addition, for some bank samples that applied the

reclassification later at year end of 2008, the results of this year will be more promising since the more significant value change of reclassified assets will emerge and act as post-effect.

Regarding the *second research question*, the relationships of the reclassification and selected characteristics of bank entities were studied by taking the sample group that did not apply the amendment as a comparison. The logistic regression and some other statistical analysis were conducted. Along with the findings from the annual report, we can conclude that the banks that did not apply the option were characterized by a higher ROE compared to the banks that had applied the reclassification. So the banks with lower ROE are more likely to apply the amendment. In contrast to ROE, the bank size exhibited positive prediction sign which means that the larger bank entities prefer to apply the option. It could be explained by the fact that the larger entities possessed more problematic financial assets to deal with. Moreover, the results also showed that the D/E ratio was relevant, but not heavily associated. The capital ratio and LLP to TA had insignificant relationship with the reclassification event, but they might be affected by the reclassification as we have discussed. With regards to the non-financial characteristics, region was the most significant factor and the operation type did not affect the decision of entities to apply the reclassification.

In order to answer the *third research question*, firstly, the disclosures on the reclassification practice were evaluated by the un-weighted checking list. As the reclassification was applied for the first time, there were some inconsistencies among sample entities, especially the disclosure about the “expected cash flow” and the “extra items”. The correlation and regression analysis were performed to examine the relationship between evaluation results on disclosure and bank characteristics. The correlation between the disclosure score and total reclassification amount was strong, but the underlying reason was the bank size which plays an important determinant role. Region is also significantly associated with the disclosure level, so was the operation region but not the operation type. The results also indicate the positive contribution from D/E ratio and the negative association of LLP to TA with disclosure level. Capital ratio is not significantly relevant to the disclosure performance.

Overall, the reclassification of financial assets was a reasonable approach to maintain the financial strength of the bank entities during a “rare” circumstance such as the current market situation. However, in order to clarify some potential problems and prevent entities to misuse this option, the regulators need to monitor the application closely. As the new amendment was adopted with no exposure draft, we believe that the application of reclassifying financial assets and the practice on the disclosure requirements will be under a developing progress for both regulators and entities.

## **6.2 Suggestions for further research**

Indeed, there are some shortcomings concerning our study, but it can be improved. For instance, we applied a limited sample and investigated some relevant factors. If relying upon some full-access databases, such as BankScope, the sample amounts and the speed of the data collection could be expanded. Moreover, more accurate models can be constructed and more comprehensive results be obtained. Nevertheless, we believe that our study provides some valuable points and results for future studies. Some of the studies conducted in this paper can be a starting point for some future topics. For instance, a more accurate logistic model could be established to study the various differences of entities that applied the reclassification and entities that did not. Having a larger sample and more factors could be a reasonable approach

to proceed. Based on our studies, the studies on the relationship between reclassification and impairment of financial assets would be a valuable contribution to this particular area. Since the financial market performances of many entities are also expected to be affected by the reclassification, this could also be a very interesting topic to look into. Furthermore, it would be interesting to see how different types of financial assets react to the reclassification; especially the problematic ones (for example embedded derivatives).

## Appendix 1: “Sample size” of the researched banks

Nr	Bank name	Country	Product area	Used reclassification	Reclassification amount €
1	Danske Bank AS	Denmark	Multi business	Yes	15704,90
2	Jyske Bank AS	Denmark	General business	Yes	599,20
3	SparNord Bank	Denmark	General business		No
4	Bank of Åland PLC	Finland	General business		No
5	Aktia PLC	Finland	Multi business		No
6	MP Investment Bank	Iceland	Multi business		No
7	DnB Nor	Norway	Multi business	Yes	9077,00
8	Storbrand	Norway	Multi business		No
9	SEB	Sweden	General business	Yes	9868,00
10	Handelsbanken	Sweden	General business	Yes	2356,50
11	Swedbank AB	Sweden	General business	Yes	680,30
12	Nordea Bank AB	Sweden	General business		No
13	Erste Group Bank AG*	Austria	Multi business		No
14	Volksbank AG	Austria	General business	Yes	1140,00
15	KBC Bank NV	Belgium	Multi business	Yes	3633,00
16	Credit Agricole*	France	Multi business	Yes	12000,00
17	Groupe Caisse d'Epargne*	France	Multi business	Yes	13900,00
18	Bayerische Landesbank*	Germany	General business	Yes	39000,00
19	Commerzbank AG	Germany	Multi business	Yes	77000,00
20	Deutsche Bank	Germany	Multi business	Yes	34400,00
21	Deutsche Postbank AG	Germany	General business	Yes	34800,00
22	Dresdner Bank AG	Germany	Multi business	Yes	1900,00
23	ING Bank Group	Netherlands	Multi business	Yes	1594,00
24	Julius Bär Holding AB	Switzerland	Multi business	Yes	42,36
25	UBS AG	Switzerland	Multi business	Yes	17479,00
26	Barclays Bank Plc	United Kingdom	Multi business	Yes	4214,60
27	HSBC Bank Plc	United Kingdom	Multi business	Yes	12877,70
28	Standard Chartered Bank	United Kingdom	Multi business	Yes	5582,72
29	Československá obchodní banka	Czech Republic	General business		No
30	Komerční banka	Czech Republic	Multi business		No
31	OTP Bank*	Hungary	Multi business	Yes	
32	Aizkraukles Banka	Latvia	General business	Yes	56,00
33	Rietuma Banka	Latvia	General business	Yes	32,86
34	Medicinos Bankas	Lithuania	General business	Yes	0,98
35	Ukio Bankas	Lithuania	General business		No
36	Bank BPH	Poland	General business		No
37	Bank Zachodni WBK S.A.	Poland	General business		No
38	Alpha Bank	Greece	Multi business	Yes	21,80
39	EFG Eurobank Ergasias	Greece	Multi business	Yes	3215,00
40	Emporiki Bank	Greece	Multi business	Yes	104,00
41	National Bank of Greece	Greece	General business	Yes	4671,00
42	Piraeus Bank	Greece	Multi business	Yes	1077,60
43	Banca Monte dei Paschi di Siena	Italy	Financial services*	Yes	3394,00
44	Intesa Sanpaolo S.p.A.	Italy	Multi business	Yes	10263,00
45	UniCredit Group	Italy	Multi business	Yes	19042,34
46	Unione di Banche Italiane	Italy	Multi business		No
47	Banco BPI SA	Portugal	Multi business	Yes	795,00
48	Banco Espírito Santo SA	Portugal	General business		No
49	Millenium bcp	Portugal	Multi business	Yes	3487,00
50	Banco Bilbao Vizcaya Argentaria	Spain	Multi business		No

## Appendix 2: Summary of the application of reclassification amendment

	Usage of reclassification forms	Usage of reclassification forms in %
1 reclassifications	18	55%
2 reclassifications	6	18%
3 reclassifications	7	21%
4 reclassifications	2	6%
Total	33	100%

An overview of how many *reclassification forms* the bank entities used

Reclassification event	Operation region		Total
	Regional wide	European-wide	
No reclassification	15	0	15
Reclassification	21	14	35
Total	36	14	50

An overview of how many banks had used the new amendment in *operation region*

Reclassification event	Operation type		Total
	General business	Multi business	
No reclassification	6	9	15
Reclassification	13	22	35
Total	19	31	50

An overview of how many bank entities employed the new option in *operation type*

Reclassification event	Region				Total
	Northern Europe	Southern Europe	Eastern Europe	Western Europe	
No reclassification	6	3	6	0	15
Reclassification	6	10	4	15	35
Total	12	13	10	15	50

An overview of how many bank entities employed the new option in the *four region* groups

### Appendix 3: Details of the reclassification in each category

Banks €	R total amount	FV to HTM	FV to AFS	FV to L&R	AFS to L&R	FA through P&L (2008)	AFS (2008)	HFM(2008)	L&R(2008)
Medicinos Bank	1,00	1,00				1,27		63,80	
Aizkraukles Banka	56,00			3,64	52,43	6,57	50,00		957,14
OTP						213,85	1814,78		
Rietuma Banka	32,86			32,86		220,00			815,71
KBC Bank NV	3633,00				3633,00		45 476		176487,00
Credit Agricole	12000,00			12000,00		591300,00			681000,00
Groupe Caisse d'Epargne	13900,00		600,00	1400,00	12500,00	111138,00	36701,00		431502,00
Volksbank AG	1140,00				1140,00		3089,00		34392,00
Bayerische Landesbank	39000,00				39000,00		62250,00		292200,00
Deutsche Bank	34400,00			23600,00	10800,00	1624000,00	24835,00		269281,00
Deutsche Postbank AG	34800,00				34800,00		83058,00		97236,00
Dresdner Bank AG	1900,00		400,00	1500,00		189293,00	9764,00		123050,00
ING Bank Group	1594,00				1594,00		8822,00		619791,00
Julius Bär Holding AG	42,36		42,36			853,17	8422,75		
UBS AG	17479,00			17479,00		182760,52			228793,87
Barclays Bank	4214,60			4214,60		186688,54			481057,29
HSBC	12877,70		1730,00	11034,00		308184,77	216526,03		672773,69
Standard Chartered Bank	5582,72		2023,65	2040,96	1518,10	10323,09	44604,79		125615,17
Commerzbank	77000,00				77,00		41534,00		83563,00
Danske Bank AS	15704,90		15704,90			2302,85	15726,52		
Jyske Bank AS	599,20	599,20				4643,00		1820,77	
DnB Nor	9077,00	9077,00				43040,44		20826,6	
SEB	9868,00			1383,00	8485,00	58607,70	15044		24566,56
Handelsbanken	2356,50	19,30	237,80	280,50	1819,00	292,27	2524,23	133,45	15216,14
Swedbank AB	680,30	680,30				130700,00		1300	
Alpha Bank	21,80				21,80		752,53		50704,70
EFG Eurobank Ergasias	3215,00				3215,00		5289,00		4613,00
Emporiki Bank	104,00		104,00				1626,00		
National Bank of Greece	4671,00	29,80	2370,60	2184,00	86,90	2190,60	9589,60	141,06	73076,46
Piraeus Bank	1077,60	601,20	398,80		77,60	89,22	875,89	3372,2	2348,30
Banca Monte dei Paschi di Siena	3394,00		455,00	769,00	2170,00	25067,00	3400,00		144496,00
Intesa Sanpaolo S.p.A.	10263,00		241,00	4020,00	6002,00	19727,00	29083,00		395189,00
UniCredit Group	19042,34	148,00		18204,74	689,60	15635,80	28700,30	723,857	612480,00
Banco Espirito Santo SA	795,00	243,00			552,00	2161,80	7094,11	2160,2	4531,98
Millenium BCP	3487,00	743,85	28,70		2714,00		1714,17	1101,84	3940,69

## Appendix 4: The summary table of changes on profit or equity

Banks	Profit (avoid losses)	Profit before tax	Profit change ratio	Equity changes	Shareholder Eq.	Equity ratio
Medicinos	0,51	1,48	34,19%		216,00	0,00%
Aizkraukles Banka	1,07	17,14	6,24%	15,00	111,43	13,46%
OTP	3,40	942,00	0,36%		4193,70	0,00%
Rietuma Banka	-1,63	33,43	-4,88%		189,30	0,00%
KBC Bank		-2379,00	0,00%	0,00	17348,00	0,00%
Credit Agricole	498,00	1266,00	39,34%		41700,00	0,00%
Groupe Caisse d'Epargne	189,00	-2803,00	-6,74%	646,00	16564,00	3,90%
Volksbank AG		-401,80	0,00%	222,00	1230,60	18,04%
Bayerische Landesbank		-5084,00	0,00%	1200,00	23100,00	5,19%
Deutsche Bank	3300,00	-5741,00	57,48%	2009,00	30703,00	6,54%
Deutsche Postbank AG		-974,00	0,00%	97,00	5019,00	1,93%
Dresdner Bank AG	671,00	-4701,00	14,27%	-240,00	2759,00	-8,70%
ING Bank Group		-1487,00	0,00%	28,00	17334,00	0,16%
Julius Bär Holding AG	3,36	595,00	0,56%		4410,00	0,00%
UBS AG	3221,00	-13830,17	23,29%		16946,00	0,00%
Barclays Bank	1,56	6323,62	0,02%		38144,00	0,00%
HSBC	2518,00	6712,10	37,51%		67332,00	0,00%
Standard charter	73,40	3462,43	2,12%	295,00	15928,00	1,85%
COBA		-403,00	0,00%	200,00	19247,00	1,04%
Danske Bank AS	260,00	299,20	86,90%	-260,00	13187,70	-1,97%
Jyske Bank AS	65,77	173,30	37,95%		1439,26	0,00%
DnB Nor	309,54	1255,30	24,66%		7949,00	0,00%
SEB	149,69	1150,20	13,01%	484,40	7704,60	6,29%
Handelsbanken	42,42	1413,50	3,00%	113,17	6913,80	1,64%
Swedbank AB	-56,46	1274,50	-4,43%		7953,00	0,00%
Alpha Bank	-17,40	625,63	-2,78%	17,40	3021,00	0,58%
EFG Eurobank Ergasias		818,00	0,00%	466,00	4292,00	10,86%
Emporiki Bank	12,70	-396,20	3,21%	-12,70	227,40	-5,58%
National Bank of Greece	343,70	1937,00	17,74%	-122,10	5971,60	-2,04%
Piraeus Bank	40,00	385,80	10,37%	-12,80	2876,15	-0,45%
Banca Monte dei Paschi di S	58,00	113,90	50,92%	108,00	14824,00	0,73%
Intesa Sanpaolo S.p.A.	459,00	3778,00	12,15%	862,00	48954,00	1,76%
UniCredit Group	2365,00	4995,00	47,35%	1,00	54999,00	0,00%
Banco Espirito Santo SA	2,14	510,60	0,42%	0,90	4499,40	0,02%
Millenium bcp	5,60	342,00	1,64%	38,10	5960,50	0,64%

## Appendix 5: The completed table of disclosure evaluation

Bank	Region	Operation region	Item A	Item B	Item C	Item D	Item E	Item F	Extra items	Total score
Danske Bank AS	NE	RW	1	1	1	1	1	1	1	7
Jyske Bank AS	NE	RW	1	1	1	1	1	1	0	6
DnB Nor	NE	RW	1	1	1	1	1	0,5	1	6,5
SEB	NE	RW	1	1	1	1	1	1	1	7
Handelsbanken	NE	RW	1	1	1	1	1	0,5	1	6,5
Swedbank AB	NE	RW	1	1	1	1	1	1	0	6
Alpha Bank	SE	RW	1	1	1	1	1	0	0	5
EFG Eurobank Ergasias	SE	RW	1	1	1	1	1	0	0	5
Emporiki Bank	SE	RW	1	1	1	1	1	0	0	5
National Bank of Greece	SE	RW	1	1	1	1	1	1	0	6
Piraeus Bank	SE	RW	1	0,5	1	1	1	0,5	0	5
<i>Banca Monte dei Paschi di Siena</i>	SE									
Intesa Sanpaolo S.p.A.	SE	EW	1	1	1	1	1	0	2	7
UniCredit Group	SE	EW	1	1	1	1	1	0	1	6
Banco Espirito Santo SA	SE	RW	1	1	1	1	0	1	0	5
Millenium BCP	SE	RW	1	1	1	1	1	0	0	5
Medicinos Bank	EE	RW	1	1	1	0	1	0,5	0	4,5
Aizkraukles Banka	EE	RW	1	0,5	1	1	1	0,5	0	5
<i>OTP</i>	EE									
Rietuma Banka	EE	RW	1	1	1	1	1	0,5	0	5,5
KBC Bank NV	WE	EW	1	1	1	1	1	1	0	6
Credit Agricole	WE	EW	1	1	1	1	1	1	2	8
<i>Groupe Caisse d'Epargne</i>	WE									
Volksbank AG	WE	RW	1	1	1	1	1	0	0	5
<i>Bayerische Landesbank</i>	WE									
Deutsche Bank	WE	EW	1	1	1	1	1	1	3	9
Deutsche Postbank AG	WE	EW	1	1	1	1	1	1	1	7
Dresdner Bank AG	WE	RW	1	1	1	1	1	1	1	7
ING Bank Group	WE	EW	1	1	1	1	1	1	0	6
Julius Bär Holding AG	WE	EW	1	1	1	1	1	0,5	0	5,5
UBS AG	WE	EW	1	1	1	1	1	1	2	8
Barclays Bank	WE	EW	1	1	1	1	1	1	0	6
HSBC	WE	EW	1	1	1	1	1	1	1	7
Standard Chartered Bank	WE	EW	1	1	1	1	1	1	1	7
Commerzbank	WE	EW	1	1	1	1	1	1	0	6

### Notes for the disclosure evaluation

1. The banks marked in *italics* have not released its annual reports
2. "NE", "SE", "EE", and "WE" stand for the four different regions. Example: Northern Europe
3. "RW" and "EW" stands for Region-wide and European-wide
4. "Extra items" include break-down information about reclassification in different business segment; break-down information about reclassification on different financial products, for instance, US market portfolios; effects of reclassification on some other issue besides profit/loss, equity, for example, the effects on credit risk or capital ratio; detailed explanation why they had reclassified

## Appendix 6: Results of Mann-Whitney U, T-test and Chi-square test

Test Statistics (a)

	DE ratio	ROE	Capital ratio	LLP to TA	Log TA
Mann-Whitney U	167.500	163.000	240.000	248.000	133.000
Wilcoxon W	287.500	793.000	870.000	878.000	253.000
Z	-2.011	-2.107	-0.476	-0.307	-2.742
Sig. (2-tailed)	0.044	0.035	0.634	0.759	0.006

a :Grouping Variable: applied the amendment or not

Independent Samples Test (t-test for Equality of Means)

		T value	df	Sig. (2-tailed)
Capital ratio	Equal variances assumed	0.614	48	0.542
	Equal variances not assumed	0.596	24.872	0.557
DE ratio	Equal variances assumed	-1.966	48	0.055
	Equal variances not assumed	-2.793	45.093	0.008
ROE	Equal variances assumed	1.615	48	0.113
	Equal variances not assumed	2.408	38.810	0.021
LLP to TA	Equal variances assumed	0.895	48	0.375
	Equal variances not assumed	0.743	18.724	0.467
Log TA	Equal variances assumed	-2.793	48	0.007
	Equal variances not assumed	-2.734	25.357	0.011

The Chi-square test for three non-financial variables

	Region**	Operation region*	Operation type
Pearson Chi-square (significance)	13.297 (0.004)	8.333 (0.004)	0.036 (0.849)
Continuity correction (significance)		6.467 (0.011)	0.000 (1.0)
Likelihood ratio (significance)	16.945 (0.001)	12.185 (0.000)	0.036 (0.849)

(group variable-reclassification event)

\*\* significant at the 0.01 level (2-tailed).

\* significant at the 0.05 level (2-tailed).

## Appendix 7: Results of correlations test for the logistic regression and individual logistic regression test

### Correlations test for the logistic regression (Spearman's rho coefficient)

	DE ratio	ROE	Capital ratio	LLP to TA	Log TA
DE ratio	1.000	-0.508 (**)	-0.188	-0.307 (*)	0.612 (**)
Sig. (2-tailed)	.	0.000	0.190	0.030	0.000
ROE	-.508 (**)	1.000	0.217	0.048	-0.303 (*)
Sig. (2-tailed)	0.000	.	0.130	0.743	0.032
Capital ratio	-0.188	0.217	1.000	-0.168	-0.217
Sig. (2-tailed)	0.190	0.130	.	0.245	0.130
LLP to TA	-0.307 (*)	0.048	-0.168	1.000	-0.325 (*)
Sig. (2-tailed)	0.030	0.743	0.245	.	0.021
Log TA	0.612 (**)	-0.303 (*)	-0.217	-0.325 (*)	1.000
Sig. (2-tailed)	0.000	0.032	0.130	0.021	.

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

### The logistic regression test for all the variables

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
$\chi^2$	7.428	12.185	0.036	6.417	7.097	0.383	0.786	6.961
Significance	0.006	0.000	0.849	0.001	0.069	0.536	0.375	0.008
-2log likelihood	53.659	48.902	61.050	54.669	53.989	60.7	60.3	54.125
	Coefficient estimates (significance)							
<b>Inde Variable</b>								
Region (no categorical)	0.814 (0.012) **							
OP region		-20.866 (0.998)						
OP type			-0.121 (0.849)					
DE ratio				0.069 (0.051) *				
ROE					-7.301 (0.046)**			
Capital ratio						-6.792 (0.536)		
LLP to TA							48.167 (0.372)	
Log TA								0.858 (0.015) **
Odds ratio--exp(B)	2.257			1.071	0.001			2.36

\*\* significant at the 0.05 level (2-tailed).

\* significant at the 0.1 level (2-tailed).

## Appendix 8: Descriptive statistics of the reclassification figures and the results of Partial Correlation

### Descriptive Statistics of variables from correlation analysis on reclassification

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Disclosure score	31	4.5	9	6.1452	1.074
Reclassified amount	34	1	77000	9958	15822
Total asset	35	216	2202000	489488	643134.5
RM to TA	34	0.0001	0.2568	0.0319	0.0521
Profit change ratio	35	-0.0674	0.869	0.1445	0.2183
Equity change ratio	35	-0.0870	0.1804	0.016	0.048

### Partial Correlation of disclosure score and reclassification amount

Control Variables		Disclosure score	Reclassified amount
Totalasset	Disclosure score	Correlation	1.000
		Significance (2-tailed)	.
		df	0
	Reclassified amount	Correlation	0.273
		Significance (2-tailed)	0.144
		df	28

## Appendix 9: Correlations test matrix for multiple regression

	Disscore	D/E ratio	ROE	Capital ratio	LLP to TA	Log TA	Region	OP region	OP type
Disscore	1.000	0.491(**)	-0.327	0.038	-0.466 (**)	0.724 (**)	0.652 (*)	0.524 (**)	0.281
Sig. (2-tailed)	.	0.005	0.072	0.841	0.008	0.000	0.011	0.002	0.126
D/E ratio	0.491(**)	1.000	-0.617 (**)	-0.216	-0.268	0.546 (**)	0.615 (**)	0.260	0.015
Sig. (2-tailed)	0.005	.	0.000	0.243	0.145	0.001	0.001	0.159	0.938
ROE	-0.327	-0.617 (**)	1.000	0.293	0.173	-0.239	-0.410 (*)	-0.267	-0.048
Sig. (2-tailed)	0.072	0.000	.	0.110	0.351	0.195	0.014	0.147	0.800
Capital ratio	0.038	-0.216	0.293	1.000	-0.379 (*)	-0.023	0.118	0.205	-0.029
Sig. (2-tailed)	0.841	0.243	0.110	.	0.035	0.904	0.498	0.269	0.876
LLP to TA	-0.466 (**)	-0.268	0.173	-0.379 (*)	1.000	-0.343	-0.577**	-0.365 (*)	-0.190
Sig. (2-tailed)	0.008	0.145	0.351	0.035	.	0.059	0.000	0.043	0.306
Log TA	0.724 (**)	0.546 (**)	-0.239	-0.023	-0.343	1.000	0.491 (**)	0.709 (**)	0.607 (**)
Sig. (2-tailed)	0.000	0.001	0.195	0.904	0.059	.	0.003	0.000	0.000
Region	0.652 (**)	0.615 (**)	-0.410 (*)	0.118	-0.577**	0.491 (**)	1.000	0.429 (*)	0.048
Sig. (2-tailed)	0.000	0.001	0.014	0.498	0.000	0.003	.	0.010	0.786
OP region	0.524 (**)	0.260	-0.267	0.205	-0.365 (*)	0.709 (**)	0.429*	1.000	0.590 (**)
Sig. (2-tailed)	0.002	0.159	0.147	0.269	0.043	0.000	0.010	.	0.000
OP type	0.281	0.015	-0.048	-0.029	-0.190	0.607 (**)	0.048	0.590 (**)	1.000
Sig. (2-tailed)	0.126	0.938	0.800	0.876	0.306	0.000	0.786	0.000	.

\*\*Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

## Appendix 10: Test results of linear regressions

	Model 1	Model 2.1	Model 2.2	Model 3.1
$R^2$	0.346	0.269	0.341	0.004
Adjusted $R^2$	0.273	0.188	0.293	-0.067
F value	4.758	8.206	7.231	4.859
Significance	0.009	0.000	0.003	0.002
Included obs	31	31	31	31
	Coefficient (Significance)	Coefficient (Significance)	Coefficient (Significance)	Coefficient (Significance)
<b>Indepen Variable</b>				
DE ratio	0.361 (0.05) *		0.321 (0.047) *	
ROE		-0.177 (0.367)		-0.068 (0.756)
Capital ratio	0.085 (0.645)	-0.008 (0.965)		0.064 (0.771)
LLP to TA	-0.511 (0.004)**	-0.539 (0.004)**	-0.526 (0.002)**	
Max VIF	1.371	1.575	1.383	1.388

\*\* significant at the 0.01 level (2-tailed).

\* significant at the 0.05 level (2-tailed).

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